

# Service Manual

ORDER NO.  
RRV 1729

FILE-TYPE CD PLAYER

# PD-F606

## PD-F506

- Refer to the service manual RRV1457 for PD-F605/KUXJ.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Type | Model   |         | Power Requirement | Remarks |
|------|---------|---------|-------------------|---------|
|      | PD-F606 | PD-F506 |                   |         |
| KUXJ | O       | O       | AC120V            |         |
| KCXJ | O       | O       | AC120V            |         |

- For the circuit and mechanism descriptions, refer to the service guide RRV1469 for PD-F605, PD-F505.

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# 1. CONTRAST OF MISCELLANEOUS PARTS

## NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

|              |               |                             |               |     |             |
|--------------|---------------|-----------------------------|---------------|-----|-------------|
| 560 $\Omega$ | $\rightarrow$ | 56 $\times$ 10 <sup>1</sup> | $\rightarrow$ | 561 | RD1/4PU561J |
| 47k $\Omega$ | $\rightarrow$ | 47 $\times$ 10 <sup>3</sup> | $\rightarrow$ | 473 | RD1/4PU473J |
| 0.5 $\Omega$ | $\rightarrow$ | R50                         |               |     | RN2H R50K   |
| 1 $\Omega$   | $\rightarrow$ | 1R0                         |               |     | RS1P 1R0K   |

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

|                |               |                              |               |      |              |
|----------------|---------------|------------------------------|---------------|------|--------------|
| 5.62k $\Omega$ | $\rightarrow$ | 562 $\times$ 10 <sup>1</sup> | $\rightarrow$ | 5621 | RN1/4PC5621F |
|----------------|---------------|------------------------------|---------------|------|--------------|

## ■ CONTRAST TABLE

PD-F606/KUXJ, PD-F606/KCXJ, PD-F506/KUXJ, PD-F506/KCXJ and PD-F605/KUXJ have the same construction except for the following:

| Mark     | Symbol & Description                             | Part No.         |                  |                  |                  |                  | Remarks |
|----------|--|------------------|------------------|------------------|------------------|------------------|---------|
|          |  | PD-F605<br>/KUXJ | PD-F606<br>/KUXJ | PD-F606<br>/KCXJ | PD-F506<br>/KUXJ | PD-F506<br>/KCXJ |         |
| $\Delta$ | MOTHER PCB ASSY                                  | PWM1989          | PWM2090          | PWM2090          | PWM2088          | PWM2088          |         |
| NSP      | SUB PCB ASSY                                     | PWX1434          | PWX1436          | PWX1436          | PWX1431          | PWX1431          |         |
|          | FUNCTION PCB ASSY                                | PWZ3134          | PWZ3136          | PWZ3136          | PWZ3131          | PWZ3131          |         |
| NSP      | POWER SW PCB ASSY                                | PWZ3145          | PWZ3145          | PWZ3145          | PWZ3143          | PWZ3143          |         |
|          | <b>PACKING</b>                                   |                  |                  |                  |                  |                  |         |
|          | Remote Control Unit                              | PWW1108          | PWW1108          | PWW1108          | Not used         | Not used         |         |
|          | Battery Cover                                    | AZN2249          | AZN2249          | AZN2249          | Not used         | Not used         |         |
| NSP      | Battery (R6P, AA)                                | AEX - 010        | AEX - 010        | AEX - 010        | Not used         | Not used         |         |
|          | Packing Case                                     | PHG2162          | PHG2225          | PHG2229          | PHG2230          | PHG2231          |         |
|          | Protector F                                      | PHA1299          | PHA1309          | PHA1309          | PHA1309          | PHA1309          |         |
|          | Protector R                                      | PHA1300          | PHA1310          | PHA1310          | PHA1310          | PHA1310          |         |
|          | Operating Instructions (English)                 | PRB1234          | PRB1252          | Not used         | PRB1252          | Not used         |         |
|          | Operating Instructions (English/French)          | Not used         | Not used         | PRE1250          | Not used         | PER1250          |         |
| NSP      | Warranty Card                                    | ARY1051          | ARY1051          | ARY1075          | ARY1051          | ARY1075          |         |
|          | Polyethylene Bag (0.03 $\times$ 230 $\times$ 34) | Z21 - 038        | Z21 - 038        | Z21 - 038        | Not used         | Not used         |         |
|          | <b>EXTERIOR</b>                                  |                  |                  |                  |                  |                  |         |
|          | Rear Base  | PNA2258          | PNA2316          | PNA2316          | PNA2323          | PNA2323          |         |
|          | Door   | PNW2616          | PNW2731          | PNW2731          | PNW2731          | PNW2731          |         |
|          | Control Panel                                    | PNW2649          | PNW2704          | PNW2704          | PNW2719          | PNW2719          |         |
|          | 65 Label   | ORW1069          | ORW1069          | Not used         | ORW1069          | Not used         |         |
|          | Display Window                                   | PAM1702          | PAM1702          | PAM1702          | PAM1699          | PAM1699          |         |
|          | 36P F.F.C/30V                                    | PDD1173          | PDD1173          | PDD1173          | Not used         | Not used         |         |
|          | 32P F.F.C/30V                                    | Not used         | Not used         | Not used         | PDD1167          | PDD1167          |         |

## ■ CONTRAST OF PCB ASSEMBLIES

### FUNCTION PCB ASSY

PWZ3136, PWZ3131 and PWZ3134 have the same construction except for the following:

| Mark | Symbol & Description        | Part No.     |              |             | Remarks |
|------|-----------------------------|--------------|--------------|-------------|---------|
|      |                             | PWZ3134      | PWZ3136      | PWZ3131     |         |
|      | R701 - R704 (10K $\Omega$ ) | ACN7011      | Not used     | Not used    |         |
|      | Remote Sensor               | SBX1785 - 51 | SBX1976 - 51 | Not used    |         |
|      | CN701                       | HLEM36R - 1  | HLEM36R - 1  | HLEM32R - 1 |         |

### POWER SW PCB ASSY

Although PWZ3143 and PWZ3145 are different in part number, they consist of the same components.

**MOTHER PCB ASSY**

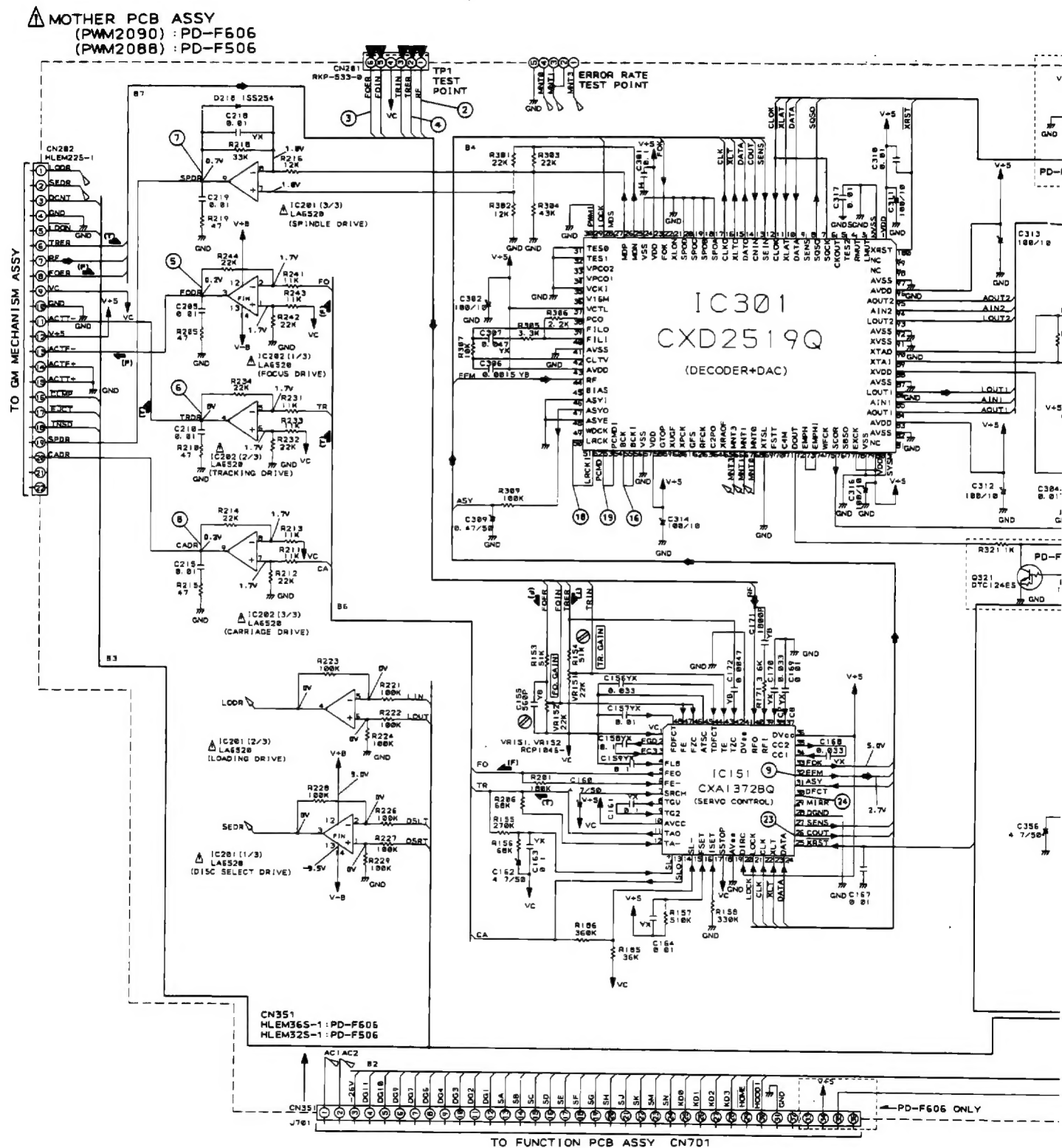
PWM2090, PWM2088 and PWM1989 have the same construction except for the following:

| Mark                   | Symbol & Description | Part No.    |             |             | Remarks |
|------------------------|----------------------|-------------|-------------|-------------|---------|
|                        |                      | PWM1989     | PWM2090     | PWM2088     |         |
| IC151                  |                      | CXA1372Q    | CXA1372BQ   | CXA1372BQ   |         |
| IC301                  |                      | CXD2508AQ   | CXD2519Q    | CXD2519Q    |         |
| IC351                  |                      | PD4674B     | PD4815A     | PD4815A     |         |
| Q321                   |                      | DTC124ES    | DTC124ES    | Not used    |         |
| D321, D391             |                      | 1SS254      | 1SS254      | Not used    |         |
| L302, L303, L321       |                      | LAU1R0J     | Not used    | Not used    |         |
| L341                   |                      | LAU1R2J     | Not used    | Not used    |         |
| C170                   |                      | CKCYB332K50 | CGCYX333K25 | CGCYX333K25 |         |
| C171                   |                      | CKCYB102K50 | CKCYB182K50 | CKCYB182K50 |         |
| C301                   |                      | Not used    | CQMA104K50  | CQMA104K50  | *       |
| C302                   |                      | CGCYX473K50 | CEAS101M10  | CEAS101M10  |         |
| C303                   |                      | CFTYA104J50 | Not used    | Not used    |         |
| C304                   |                      | CGCYX473K25 | CKCYF103Z50 | CKCYF103Z50 |         |
| C311 – C314, C316      |                      | Not used    | CEAS101M10  | CEAS101M10  | *       |
| C317                   |                      | Not used    | CKCYF103Z50 | CKCYF103Z50 | *       |
| C321                   |                      | CGCYX104K25 | CGCYX104K25 | Not used    |         |
| C322                   |                      | CEAS101M6R3 | CEAS101M10  | Not used    |         |
| C325                   |                      | CKCYF103Z50 | Not used    | Not used    |         |
| C341                   |                      | CCCCH100D50 | CCCCH120J50 | CCCCH120J50 |         |
| C342                   |                      | CKCYB102K50 | CCCCH120J50 | CCCCH120J50 |         |
| C343                   |                      | CCCCH220J50 | Not used    | Not used    |         |
| C356                   |                      | Not used    | CEAS4R7M50  | CEAS4R7M50  | *       |
| C364                   |                      | Not used    | CKCYF103Z50 | CKCYF103Z50 | *       |
| C393                   |                      | CCCSL101J50 | Not used    | Not used    |         |
| C398                   |                      | Not used    | CCCSL101J50 | CCCSL101J50 | *       |
| C399                   |                      | Not used    | CKCYF103Z50 | CKCYF103Z50 | *       |
| C421, C422             |                      | CKCYB471K50 | Not used    | Not used    |         |
| C423 – C426            |                      | CCCSL181J50 | Not used    | Not used    |         |
| C433, C434             |                      | CEANP220M10 | CEAS220M25  | CEAS220M25  |         |
| C435 – C438            |                      | CCCSL101J50 | Not used    | Not used    |         |
| C481, C482             |                      | Not used    | CCCSL390J50 | CCCSL390J50 | *       |
| R160                   |                      | RD1/4PU274J | Not used    | Not used    |         |
| R171                   |                      | Not used    | RD1/4PU362J | RD1/4PU362J | *       |
| R306                   |                      | RD1/4PU682J | RD1/4PU222J | RD1/4PU222J |         |
| R308                   |                      | RD1/4PU104J | Not used    | Not used    |         |
| R309, R487 – R490      |                      | Not used    | RD1/4PU104J | RD1/4PU104J | *       |
| R321                   |                      | RD1/4PU471J | RD1/4PU102J | Not used    |         |
| R323                   |                      | Not used    | RD1/4PU152J | Not used    | *       |
| R341                   |                      | RD1/4PU511J | RD1/4PU271J | RD1/4PU271J |         |
| R360, R363, R365       |                      | RD1/4PU103J | Not used    | Not used    |         |
| R385, R386             |                      | RD1/4PU221J | Not used    | Not used    |         |
| R419 – R422            |                      | RD1/4PU562J | Not used    | Not used    |         |
| R427 – R430            |                      | RD1/4PU153J | Not used    | Not used    |         |
| R435, R436             |                      | RD1/4PU333J | Not used    | Not used    |         |
| R437, R438             |                      | RD1/4PU333J | RD1/4PU473J | RD1/4PU473J |         |
| R439 – R442            |                      | RD1/4PU563J | RD1/4PU823J | RD1/4PU823J |         |
| R481, R482, R485, R486 |                      | Not used    | RD1/4PU223J | RD1/4PU223J | *       |
| CN351                  |                      | HLEM36S     | HLEM36S     | HLEM32S     |         |
| JA301                  |                      | TOTX178     | Not used    | Not used    |         |
| JA321                  |                      | Not used    | GPIF32T     | Not used    | *       |
| X341                   |                      | ASS7000     | PSS1008     | PSS1008     |         |

Note \*: Refer to "SCHEMATIC AND PCB CONNECTION DIAGRAMS".

## 2. SCHEMATIC AND PCB CONNECTION DIAGRAMS

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"



## Note:

The numbers marked with a circle show the number of each measuring point, which correspond to the number in the service manual PD-F605 (ORDER NO. RRV1457) on page13.

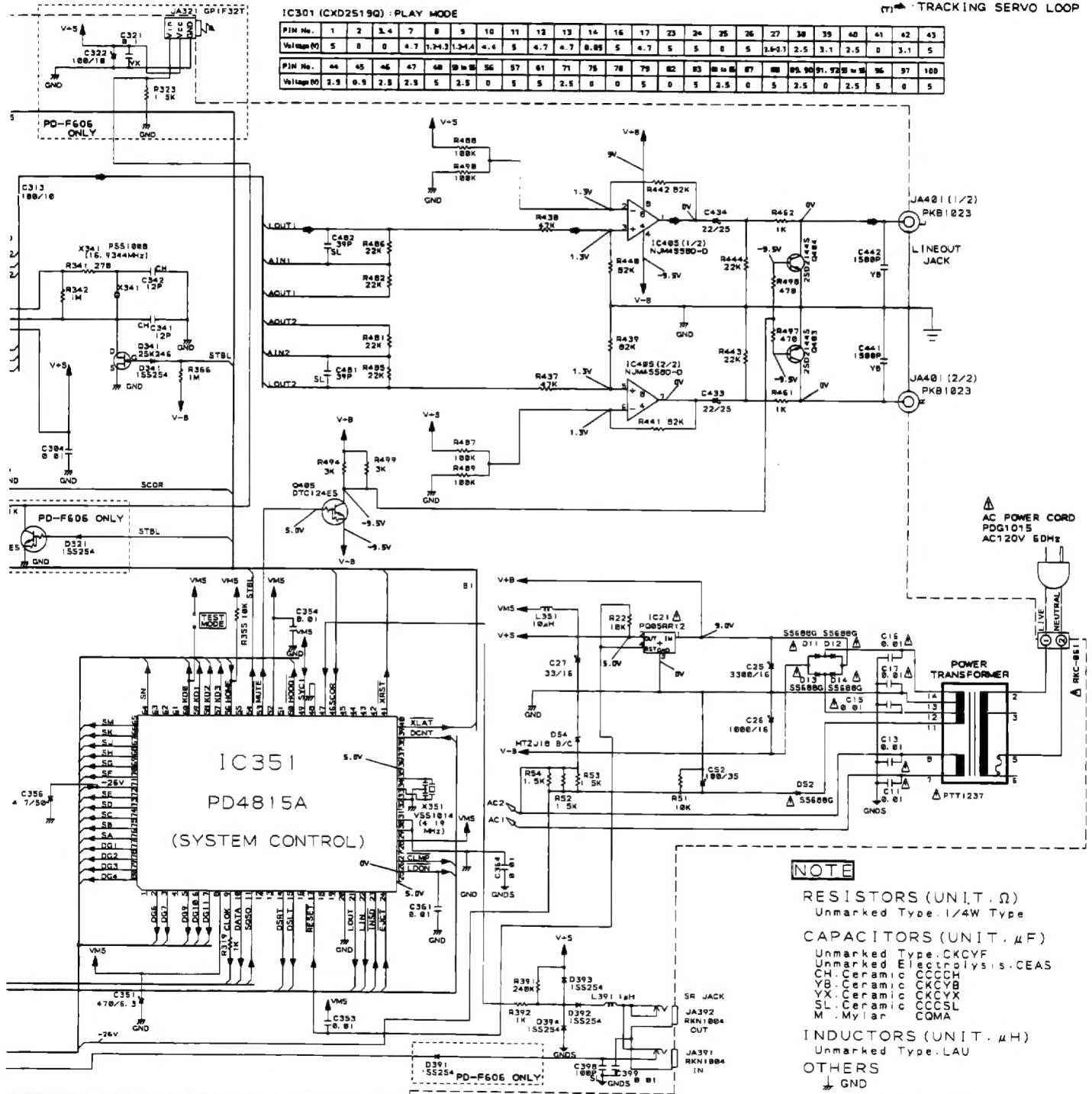
## SIGNAL ROUTE

- ◆ AUDIO SIGNAL
- (F) FOCUS SERVO LOOP
- (T) TRACKING SERVO LOOP

## IC301 (CXD2519Q) : PLAY MODE

| PIN No.     | 1 | 2 | 3,4 | 7      | 8      | 9   | 10 | 11  | 12  | 13   | 14 | 16  | 17 | 23 | 24 | 25      | 26  | 27  | 38  | 39 | 40  | 41 | 42 | 43 |
|-------------|---|---|-----|--------|--------|-----|----|-----|-----|------|----|-----|----|----|----|---------|-----|-----|-----|----|-----|----|----|----|
| Voltage (V) | 5 | 0 | 4.7 | 1.24.3 | 1.34.4 | 4.4 | 5  | 4.7 | 4.7 | 0.05 | 5  | 4.7 | 5  | 0  | 5  | 1.4.1.1 | 2.5 | 3.1 | 2.5 | 0  | 3.1 | 5  |    |    |

| PIN No.     | 44  | 45  | 46  | 47  | 48 | 49  | 56 | 57 | 61 | 71  | 75 | 78 | 79 | 82 | 83 | 84  | 87 | 88 | 89  | 90 | 91 | 92  | 93 | 96  | 97 | 100 |   |
|-------------|-----|-----|-----|-----|----|-----|----|----|----|-----|----|----|----|----|----|-----|----|----|-----|----|----|-----|----|-----|----|-----|---|
| Voltage (V) | 2.5 | 0.5 | 2.5 | 2.5 | 5  | 2.5 | 0  | 5  | 5  | 2.5 | 0  | 0  | 5  | 0  | 5  | 2.5 | 0  | 5  | 2.5 | 0  | 5  | 2.5 | 0  | 2.5 | 5  | 0   | 5 |



## NOTE

RESISTORS (UNIT:  $\Omega$ )  
Unmarked Type: 1/4W Type

CAPACITORS (UNIT:  $\mu F$ )  
Unmarked Type: CKCYF  
Unmarked Electrolysis: CEAS  
CH: Ceramic CCCCCH  
YB: Ceramic CCKCYB  
YX: Ceramic CCKCYX  
SL: Ceramic CCKCSL  
M: Mylar CQMA

INDUCTORS (UNIT:  $\mu H$ )  
Unmarked Type: LAU

## OTHERS

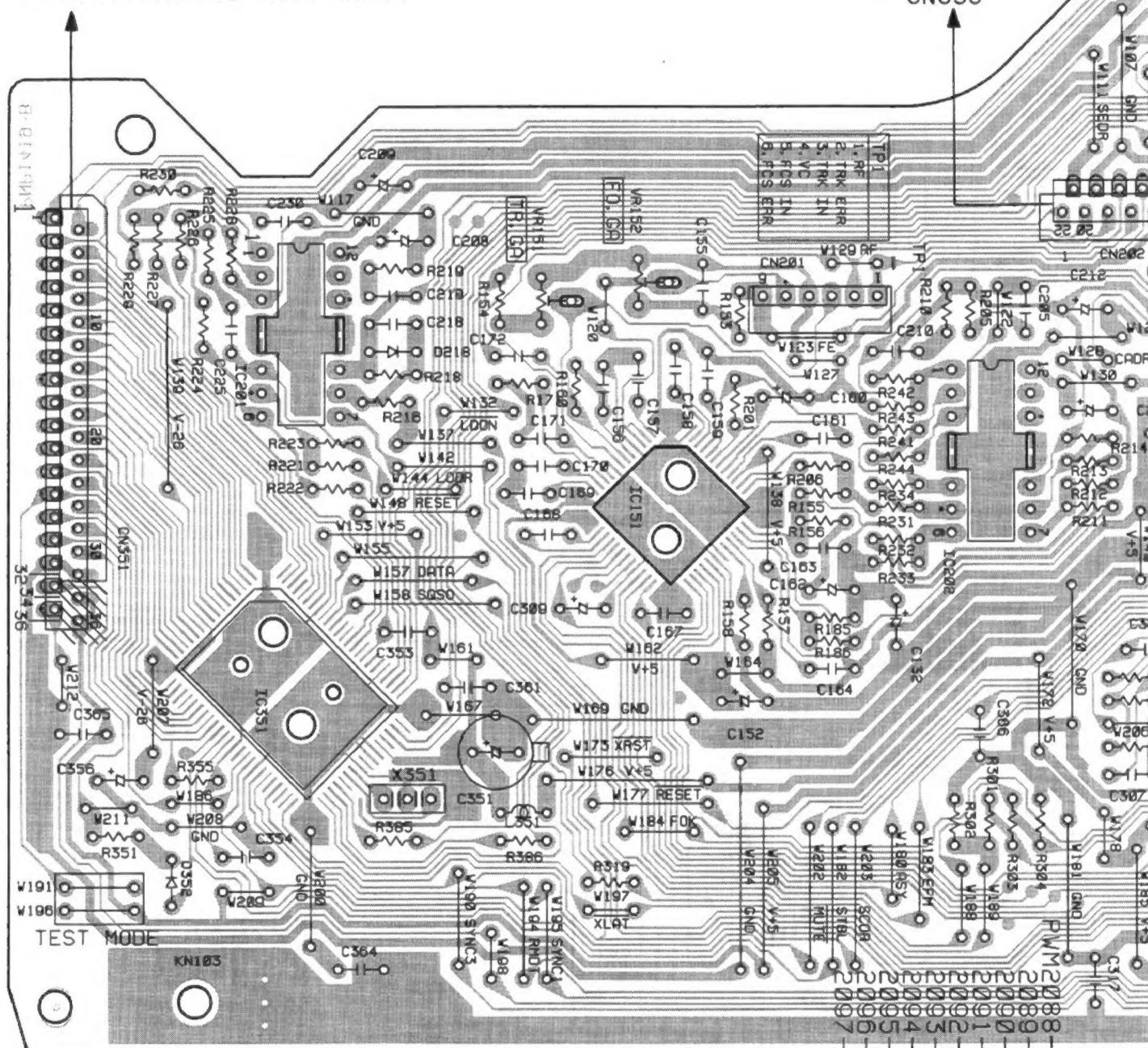
- ↓ GND
- ↓ CHASSIS GROUND
- ABC Low Active Signal

MOTHER PCB ASSY

SIDE A

TO FUNCTION PCB ASSY CN701

TO MECHA PCB ASSY  
CN653



VR151 VR152

IC201  
IC351

IC151

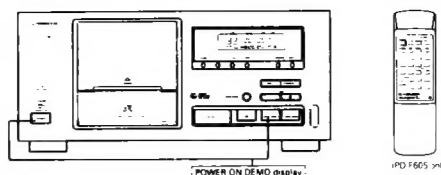
IC202





# Service Manual

**PIONEER**  
The Art of Entertainment



ORDER NO.  
**RRV 1457**

FILE-TYPE CD PLAYER

# PD-F605

## PD-F505

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Type | Model   |         | Power Requirement | Remarks |
|------|---------|---------|-------------------|---------|
|      | PD-F605 | PD-F505 |                   |         |
| KUXJ | O       | O       | AC120V            |         |

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T-FFR JAN. 1996 Printed in Japan



# 1. SAFETY INFORMATION



This service manual is intended for qualified service technicians; It is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

## WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.



## NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

## REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

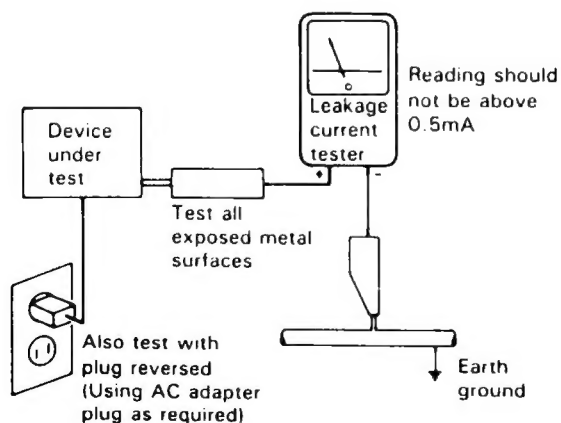
(FOR USA MODEL ONLY)

## 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

## 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## 2. PACKING, EXPLODED VIEWS AND PARTS LIST

### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

### ■ CONTRAST OF PD-F605 AND PD-F505

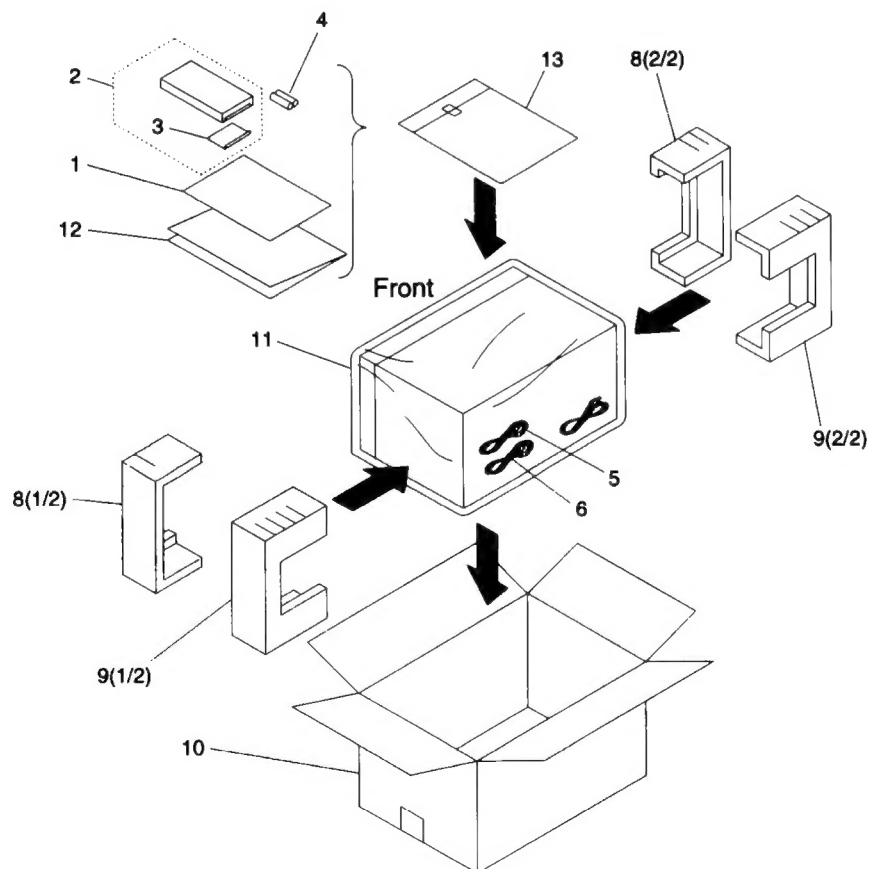
PD-F505 and PD-F605 have the same construction except for the following:

| Mark | No. | Symbol & Description | Part No.  |          | Remarks |
|------|-----|----------------------|-----------|----------|---------|
|      |     |                      | PD-F605   | PD-F505  |         |
|      | 2   | Remote Control       | PWW1108   | Not used |         |
|      | 3   | Battery Cover        | AZN2249   | Not used |         |
|      | 4   | Battery (R6P, AA)    | AEX - 010 | Not used |         |
|      | 10  | Packing Case         | PHG2162   | PHG2156  |         |

### ■ PARTS LIST FOR PD-F605

| Mark | No. | Description                      | Parts No. | Mark | No. | Description      | Parts No. |
|------|-----|----------------------------------|-----------|------|-----|------------------|-----------|
|      | 1   | Operating Instructions (English) | PRB1234   |      | 11  | Packing Sheet    | AHG7010   |
|      | 2   | Remote Control Unit              | PWW1108   | NSP  | 12  | Warranty Card    | ARY1051   |
|      | 3   | Battery Cover                    | AZN2249   |      | 13  | Polyethylene Bag | Z21 - 038 |
| NSP  | 4   | Battery (R6P, AA)                | AEX - 010 |      |     |                  |           |
|      | 5   | Cord with Mini Plug              | PDE1247   |      |     |                  |           |
|      | 6   | Cord with Plug                   | PDE1248   |      |     |                  |           |
|      | 7   | .....                            |           |      |     |                  |           |
|      | 8   | Protector F                      | PHA1299   |      |     |                  |           |
|      | 9   | Protector R                      | PHA1300   |      |     |                  |           |
|      | 10  | Packing Case                     | PHG2162   |      |     |                  |           |

### PACKING



### 3. EXPLODED VIEWS AND PARTS LIST

**NOTES:**

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

#### 3.1 EXTERIOR

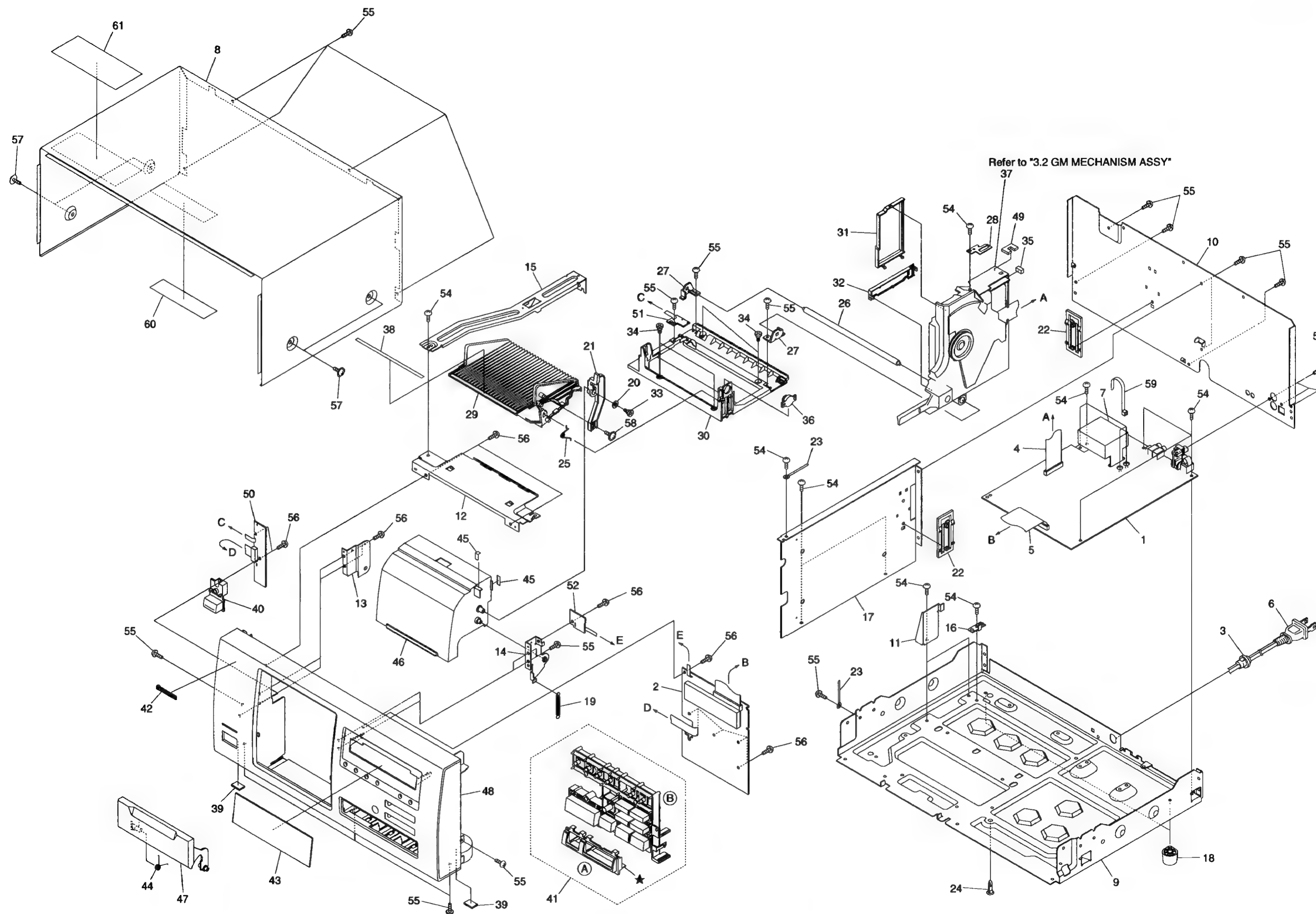
##### ■ CONTRAST OF PD-F505 AND PD-F605

PD-F505 and PD-F605 have the same construction except for the following:

| Mark     | No. | Symbol & Description | Part No. |          | Remarks |
|----------|-----|----------------------|----------|----------|---------|
|          |     |                      | PD-F605  | PD-F505  |         |
| $\Delta$ | 1   | Mother PCB ASSY      | PWM1989  | PWM1984  |         |
|          | 2   | Function PCB ASSY    | PWZ3134  | PWZ3129  |         |
|          | 5   | 36P F.F.C/30V        | PDD1173  | Not used |         |
|          | 5   | 32P F.F.C/30V        | Not used | PDD1167  |         |
|          | 10  | Rear Base            | PNA2258  | PNA2241  |         |
| NSP      | 43  | Display Window       | PAM1702  | PAM1699  |         |
|          | 48  | Panel                | PNW2649  | PNW2617  |         |
|          | 50  | Power SW PCB ASSY    | PWZ3145  | PWZ3143  |         |

##### ■ PARTS LIST FOR PD-F605

| Mark     | No. | Description         | Parts No. | Mark | No. | Description          | Parts No.     |
|----------|-----|---------------------|-----------|------|-----|----------------------|---------------|
| $\Delta$ | 1   | Mother PCB ASSY     | PWM1989   |      | 31  | Servo Cover          | ANW7073       |
|          | 2   | Function PCB ASSY   | PWZ3134   |      | 32  | Nice Cover           | ANW7074       |
|          | 3   | Cord Stopper        | CM – 22C  |      | 33  | Screw P              | PBA1105       |
|          | 4   | 22P F.F.C/30V       | PDD1170   |      | 34  | Screw C              | PBA1106       |
|          | 5   | 36P F.F.C/30V       | PDD1173   | NSP  | 35  | C.H.Spacer           | PEB1295       |
| $\Delta$ | 6   | AC Power Cord       | PDG1015   |      | 36  | Damper ASSY 80       | PXA1584       |
|          | 7   | Power Transformer   | PTT1237   | NSP  | 37  | GM Mechanism         | AXA7026       |
|          | 8   | Bonnet              | PYY1187   |      | 38  | Disc Rack Panel      | AAK7251       |
|          | 9   | Under Base          | PNA2249   |      | 39  | Rubber Sheet         | AEB1111       |
|          | 10  | Rear Base           | PNA2258   |      | 40  | Power Button         | PAC1815       |
| NSP      | 11  | F.B Stopper         | PNB1565   |      | 41  | Operate Button       | PAC1816       |
|          | 12  | Panel Angle         | PNB1545   |      | 42  | Name Plate           | PAM1608       |
|          | 13  | Hood Angle L        | PNB1546   |      | 43  | Display Window       | PAM1702       |
|          | 14  | Hood Angle R        | PNB1547   |      | 44  | Door Spring          | PBH1216       |
|          | 15  | Home Lock Angle 1   | PNB1548   | NSP  | 45  | Cushion (ART. SVEDE) | PED1016       |
|          | 16  | Home Lock Angle 2   | PNB1549   |      | 46  | Hood                 | PNW2613       |
|          | 17  | Barrier             | PNB1550   |      | 47  | Door                 | PNW2616       |
|          | 18  | Foot ASSY           | AEC1531   |      | 48  | Panel                | PNW2649       |
|          | 19  | Link Spring         | PBH1215   |      | 49  | Assist Spacer        | PNM1295       |
|          | 20  | Link Spacer         | PEB1292   | NSP  | 50  | Power SW PCB ASSY    | PWZ3145       |
|          | 21  | Link                | PNW2614   | NSP  | 51  | Home SW PCB ASSY     | PWZ3149       |
|          | 22  | FFC Holder          | PNW2615   | NSP  | 52  | Hood SW PCB ASSY     | PWZ3151       |
|          | 23  | Cord Clamper        | RNH – 184 |      | 53  | .....                |               |
|          | 24  | Locking Card Spacer | VEC1596   |      | 54  | Screw                | BBZ30P060FMC  |
|          | 25  | Rack Spring         | ABH7057   |      | 55  | Screw                | BBZ30P080FZK  |
| NSP      | 26  | Guide Shaft – 25    | ALA7007   |      | 56  | Screw                | PPZ30P080FMC  |
|          | 27  | Shaft Holder        | ANB7021   |      | 57  | Screw                | FBT40P080FZK  |
|          | 28  | Assist Angle        | ANB7043   |      | 58  | Screw                | IBZ30P080FMC  |
|          | 29  | Disc Rack           | ANW7069   |      | 59  | Binder               | ZCA – SKB90BK |
|          | 30  | Rack Base S         | ANW7070   |      | 60  | 65 Label             | ORW1069       |
|          |     |                     |           |      | 61  | Caution Level 25     | PRW1423       |



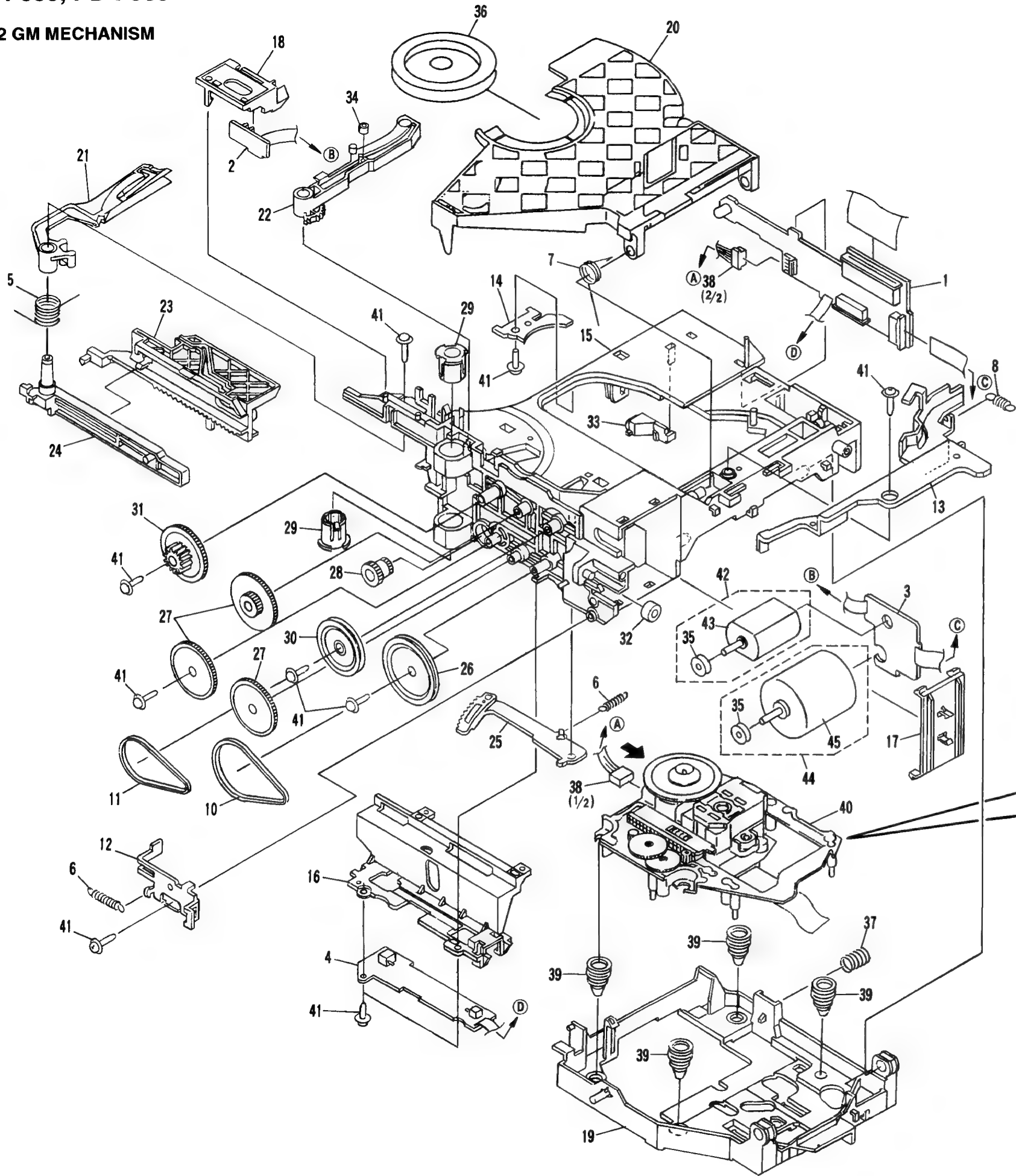
3.2 GM MECHANISM

A

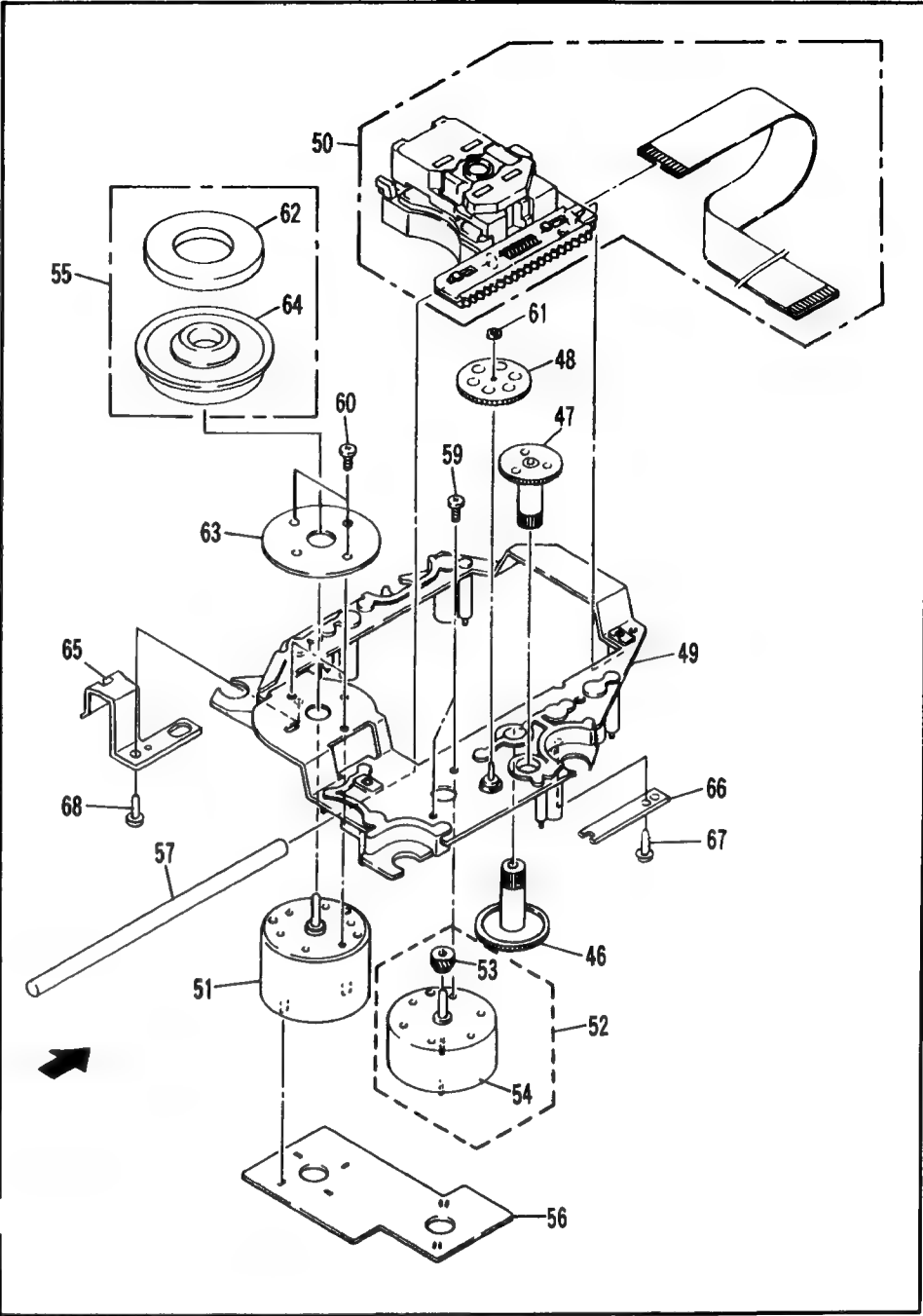
B

C

D



Servo Mechanism Assy GM



A

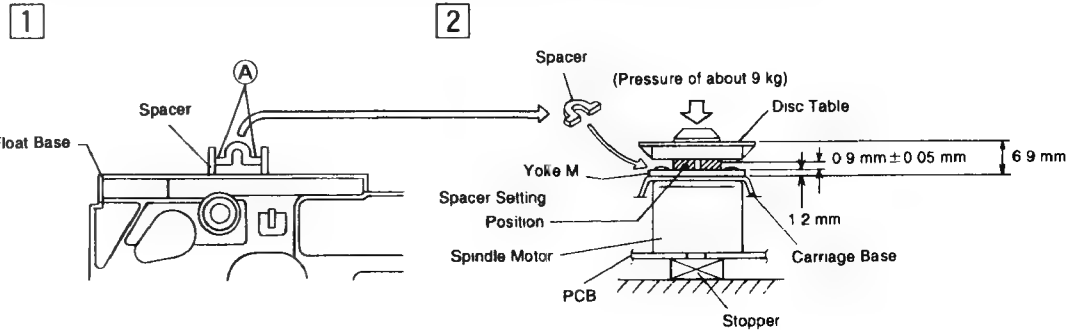
B

C

D

● How to install the disc table

- 1 Use nipper or other tool to cut the two sections marked A figure 1. Then remove the spacer.
- 2 While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



## Parts List

| Mark | No. | Description             | Parts No.    |
|------|-----|-------------------------|--------------|
| NSP  | 1   | Mecha PCB Assy          | AWZ7835      |
| NSP  | 2   | Sensor PCB Assy         | AWZ7836      |
| NSP  | 3   | Motor PCB Assy          | AWZ7837      |
| NSP  | 4   | SW PCB Assy             | AWZ7838      |
|      | 5   | Arm A Spring            | ABH7050      |
|      | 6   | Gear Plate Spring       | ABH7051      |
|      | 7   | Clamp Spring            | ABH7107      |
|      | 8   | Lock Lever Spring       | ABH7106      |
|      | 9   | .....                   |              |
|      | 10  | Loading Belt            | AEB7029      |
|      | 11  | Belt                    | AEB7030      |
| NSP  | 12  | Lock Angle              | ANB7027      |
| NSP  | 13  | Lock Lever              | ANB7038      |
| NSP  | 14  | Servo Stopper S         | ANB7047      |
|      | 15  | Loading Base            | ANW7051      |
|      | 16  | Cam Cover               | ANW7052      |
|      | 17  | Motor Holder            | ANW7053      |
|      | 18  | Sensor Holder           | ANW7054      |
|      | 19  | Float Base              | ANW7088      |
|      | 20  | Clamper Holder          | ANW7056      |
|      | 21  | Arm (A)                 | ANW7057      |
|      | 22  | Arm (B)                 | ANW7058      |
|      | 23  | Drive Plate             | ANW7059      |
|      | 24  | Arm Plate               | ANW7060      |
|      | 25  | Gear Plate              | ANW7061      |
|      | 26  | Gear Pulley (B)         | ANW7062      |
|      | 27  | Gear A                  | ANW7063      |
|      | 28  | Drive Gear              | ANW7064      |
|      | 29  | Bearing                 | ANW7065      |
|      | 30  | Gear Pulley (A)         | ANW7066      |
|      | 31  | Select Gear             | ANW7067      |
|      | 32  | Roller                  | ANW7068      |
|      | 33  | LED Lens                | ANW7072      |
|      | 34  | Roller B                | ANW7075      |
|      | 35  | Motor Pulley            | PNW1634      |
|      | 36  | Clamper                 | PNW2569      |
|      | 37  | Float Spring            | ABH7049      |
|      | 38  | Connector Assy (4P)     | ADE7006      |
|      | 39  | Float Rubber            | AEB7028      |
| NSP  | 40  | Servo Mechanism Assy GM | AXA7028      |
|      | 41  | Screw                   | IPZ20P080FMC |
|      | 42  | Motor Assy              | AEA7005      |
| NSP  | 43  | Motor                   | PXM1002      |
|      | 44  | Motor Assy              | AEA7006      |
|      | 45  | Loading Motor           | VXM1034      |
|      | 46  | Gear 1                  | PNW2052      |
|      | 47  | Gear 2                  | PNW2053      |
|      | 48  | Gear 3                  | PNW2054      |
|      | 49  | Carriage Base           | PNW2445      |
|      | 50  | Pickup Assy             | AEA7004      |

| Mark | No. | Description            | Parts No.    |
|------|-----|------------------------|--------------|
|      | 51  | D.C. Motor Assy        | PEA1235      |
|      | 52  | Carriage DC Motor Assy | PEA1246      |
|      | 53  | Pinion Gear            | PNW2055      |
| NSP  | 54  | Carriage DC Motor/0.3W | PXM1027      |
|      | 55  | Disc Table Assy        | PEA1314      |
|      | 56  | Mechanism Board Assy   | PWX1192      |
|      | 57  | Guide Bar              | PLA1094      |
|      | 58  | .....                  |              |
|      | 59  | Screw                  | JFZ17P025FZK |
|      | 60  | Screw                  | JFZ20P040FMC |
|      | 61  | Washer                 | WT12D032D025 |
|      | 62  | Clamp Magnet           | PMF1014      |
|      | 63  | Yoke M                 | PNB1312      |
| NSP  | 64  | Disc Table             | PNW2410      |
| NSP  | 65  | Float Angle            | ANB7020      |
|      | 66  | Gear Stopper           | PNB1303      |
|      | 67  | Screw                  | BPZ20P060FMC |
|      | 68  | Screw                  | BPZ26P100FMC |
|      | 69  | .....                  |              |
|      | 70  | Froil                  | GYA1001      |
|      | 71  | Ha Narl                | GEM1016      |



## 4. SCHEMATIC AND PCB CONNTCTION DIAGRAMS

### 4.1 GM MECHANISM

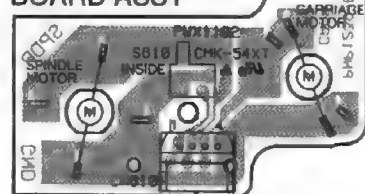
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name                |
|------------------------|------------------------------|--------------------------|
|                        |                              | Transistor               |
|                        |                              | Transistor with resistor |
|                        |                              | Field effect transistor  |
|                        |                              | Resistor array           |
|                        |                              | 3-terminal regulator     |

#### GM MECHA ASSY

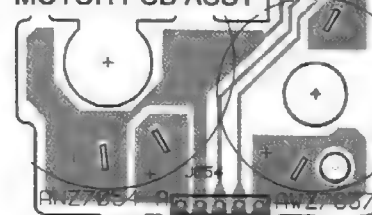
##### MECHANISM BOARD ASSY



##### SENSOR PCB ASSY



##### MOTOR PCB ASSY

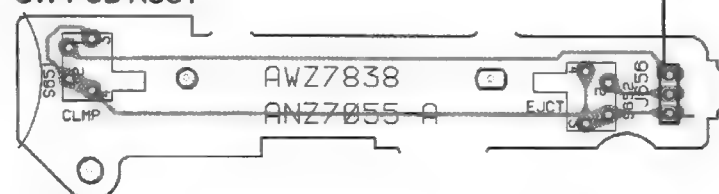


To MOTHER PCB assy CN202

##### MECHA PCB ASSY



##### SW PCB ASSY



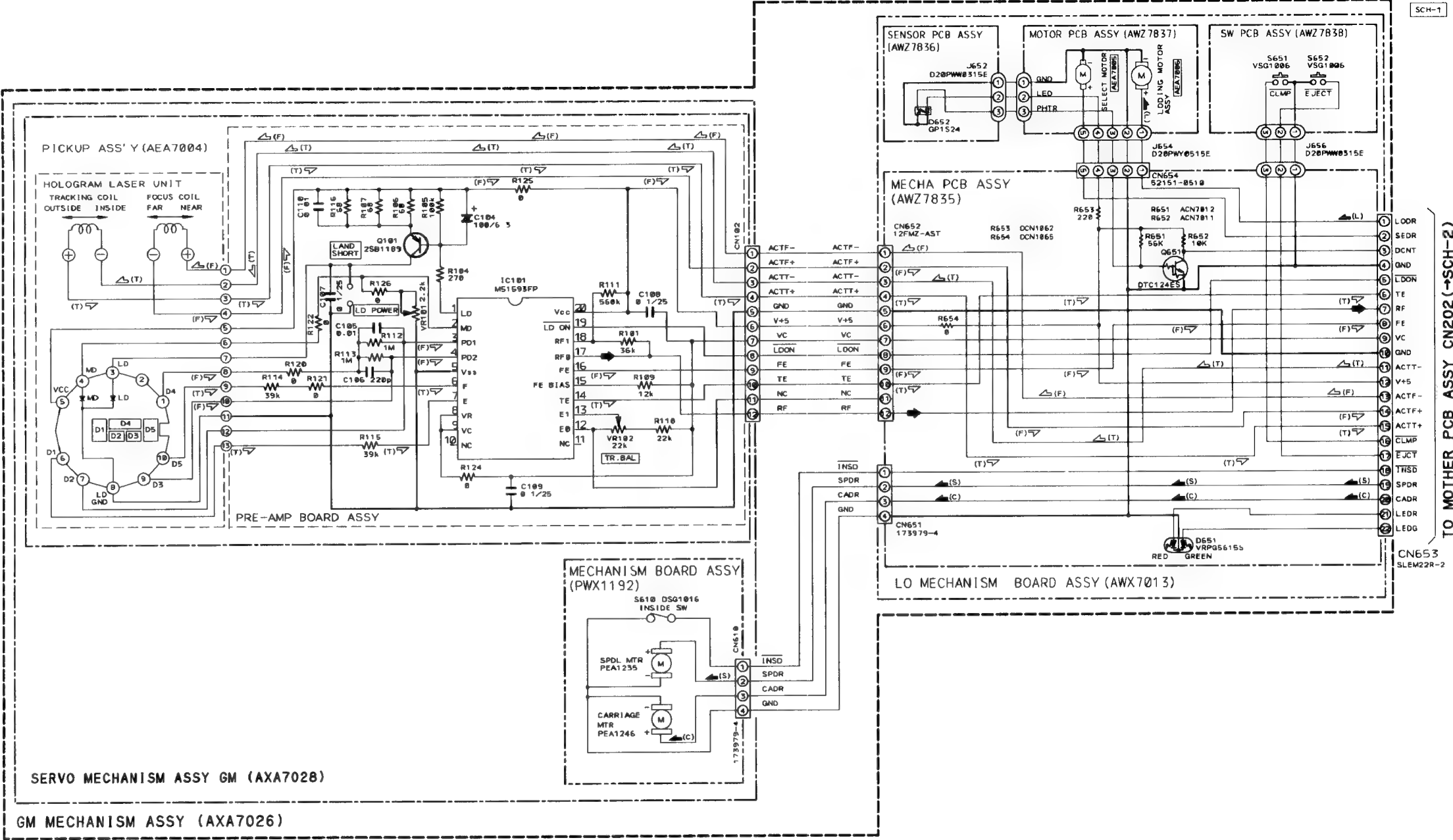
To PICKUP assy

• This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

**NOTE FOR SCHEMATIC DIAGRAMS** (Type 4A)

- When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".
- Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
- RESISTORS:**  
Unit: k: kΩ, M: MΩ, or Ω unless otherwise noted.  
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.  
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
- CAPACITORS:**  
Unit: p: pF or μF unless otherwise noted.  
Ratings: capacitor (μF)/voltage(V) unless otherwise noted.  
Rated voltage: 50V except for electrolytic capacitors.
- COILS:**  
Unit: m.mH or μH unless otherwise noted.
- VOLTAGE AND CURRENT:**  
□ or ← V  
DC voltage (V) in PLAY mode unless otherwise noted.  
◁ mA or ← mA.  
DC current in PLAY mode unless otherwise noted.  
Value in ( ) is DC current in STOP mode.
- OTHERS:**  
• ◯ or ◐ : Adjusting point  
• ◀ : Measurement point.  
• The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- SCH-□ ON THE SCHEMATIC DIAGRAM:**  
• SCH-□ indicates the drawing number of the schematic diagram (SCH stands for schematic diagram.)
- SWITCHES** (Underline indicates switch position):  
FUNCTION PCB ASSY  
S701 : MODE  
S702 : CLEAR  
S703 : ■  
S704 : ◀ ▶  
S705 : ▶▶  
S707 : HI-LITE  
S708 : PROGRAM  
S709 : ▶/II  
S710 : BEST  
S711 : DISC -  
S712 : DISC +  
S713 : RANDOM  
S714 : REPEAT  
S715 : PREVIOUS  
POWER SW PCB ASSY  
S752 : POWER STANDBY/ON



SCH-1

GM MECHANISM

SCH-1

GM MECHANISM

4.2 MOTHER PCB, FUNCTION PCB, POWER SW PCB, HOME SW PCB AND HOOD SW PCB ASSEMBLIES

A

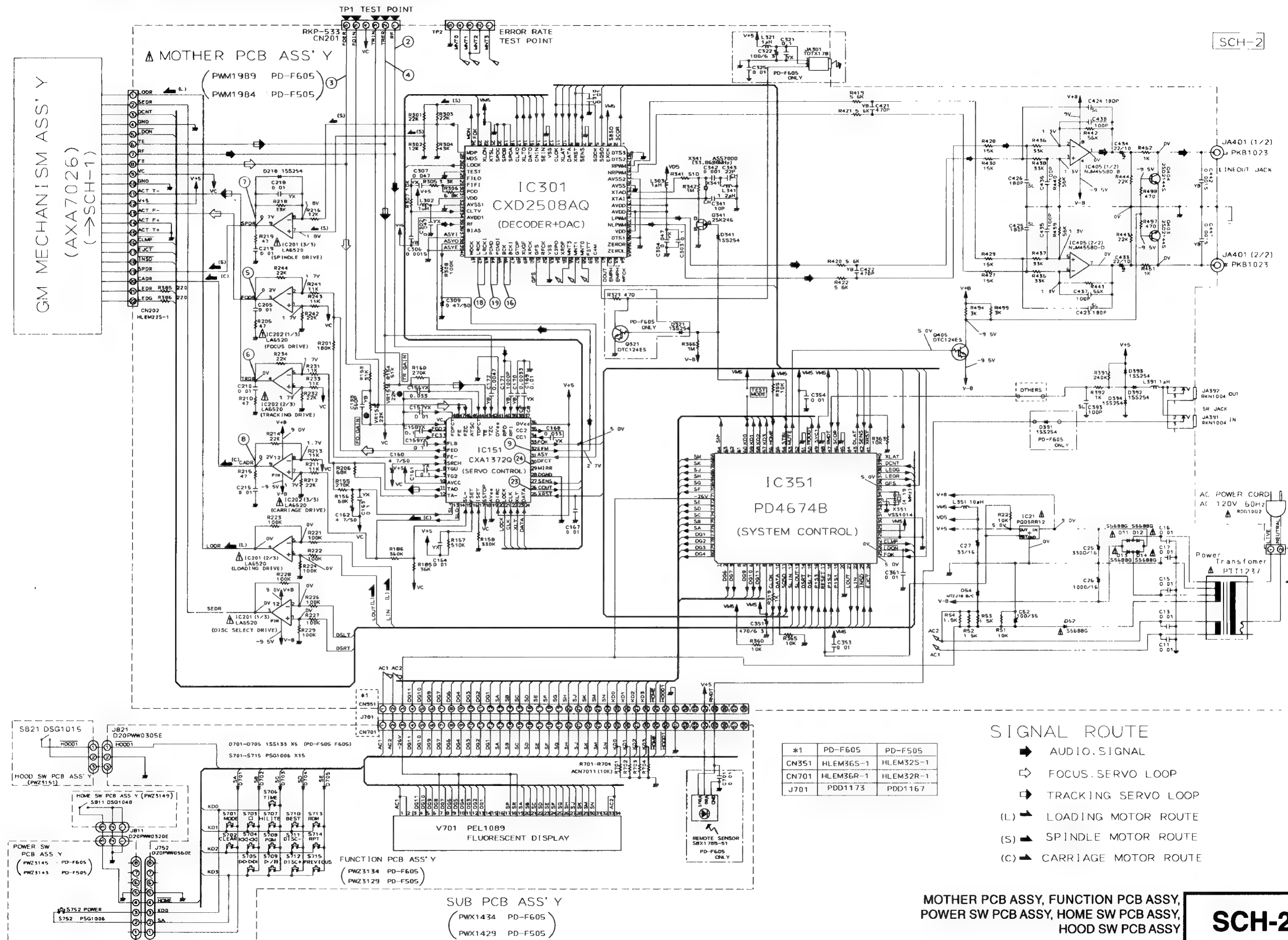
B

C

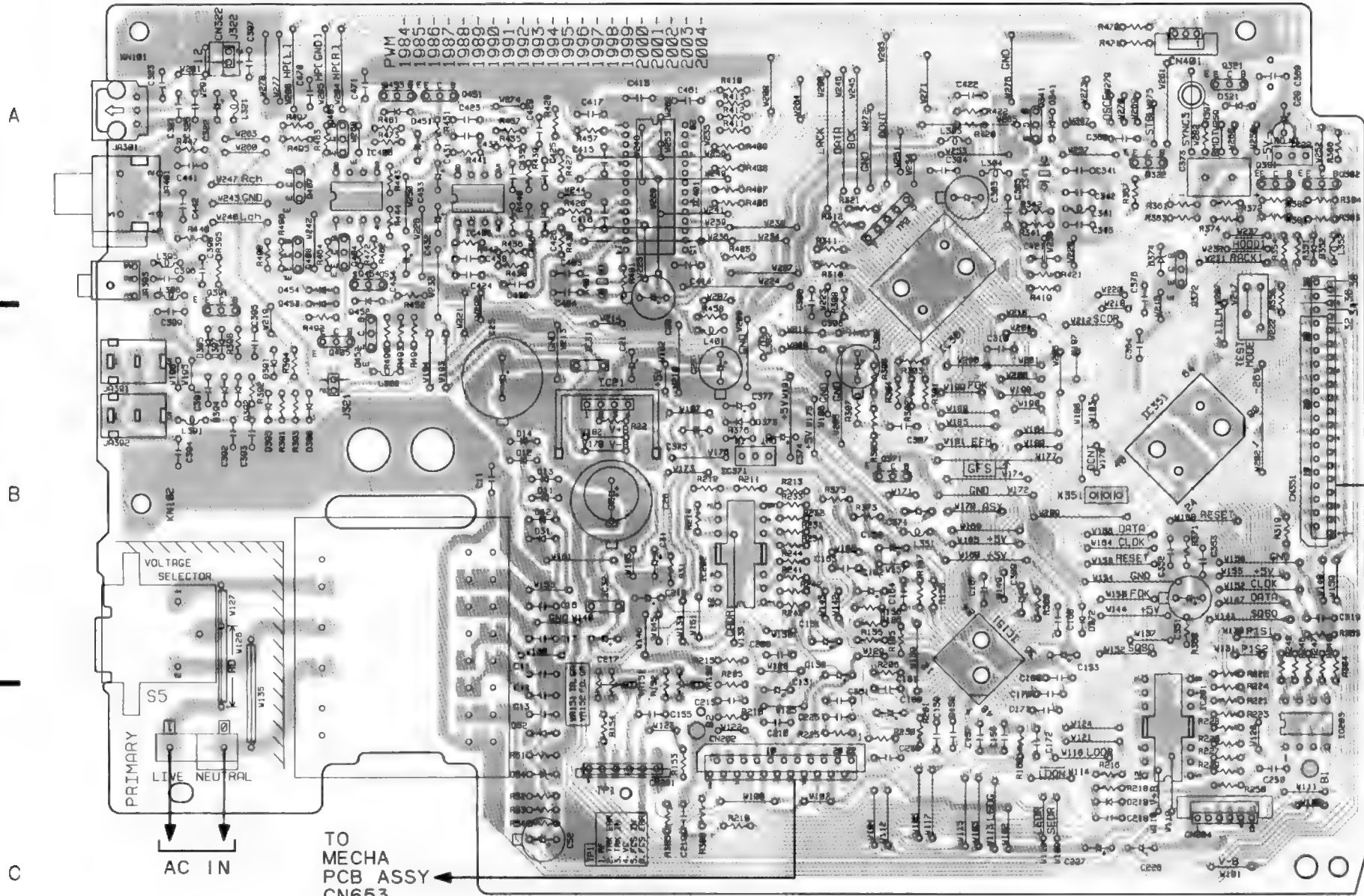
D

MOTHER PCB ASSY, FUNCTION PCB ASSY,  
POWER SW PCB ASSY, HOME SW PCB ASSY,  
HOOD SW PCB ASSY

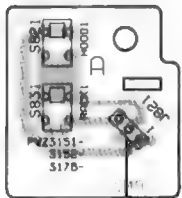
SCH-2



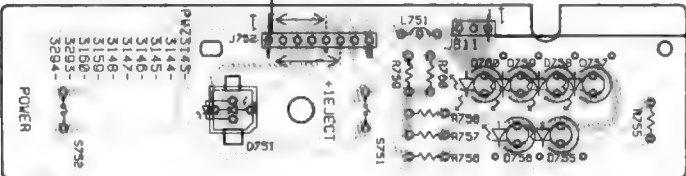
MOTHER PCB ASSY



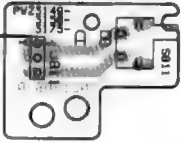
HOOD SW PCB ASSY



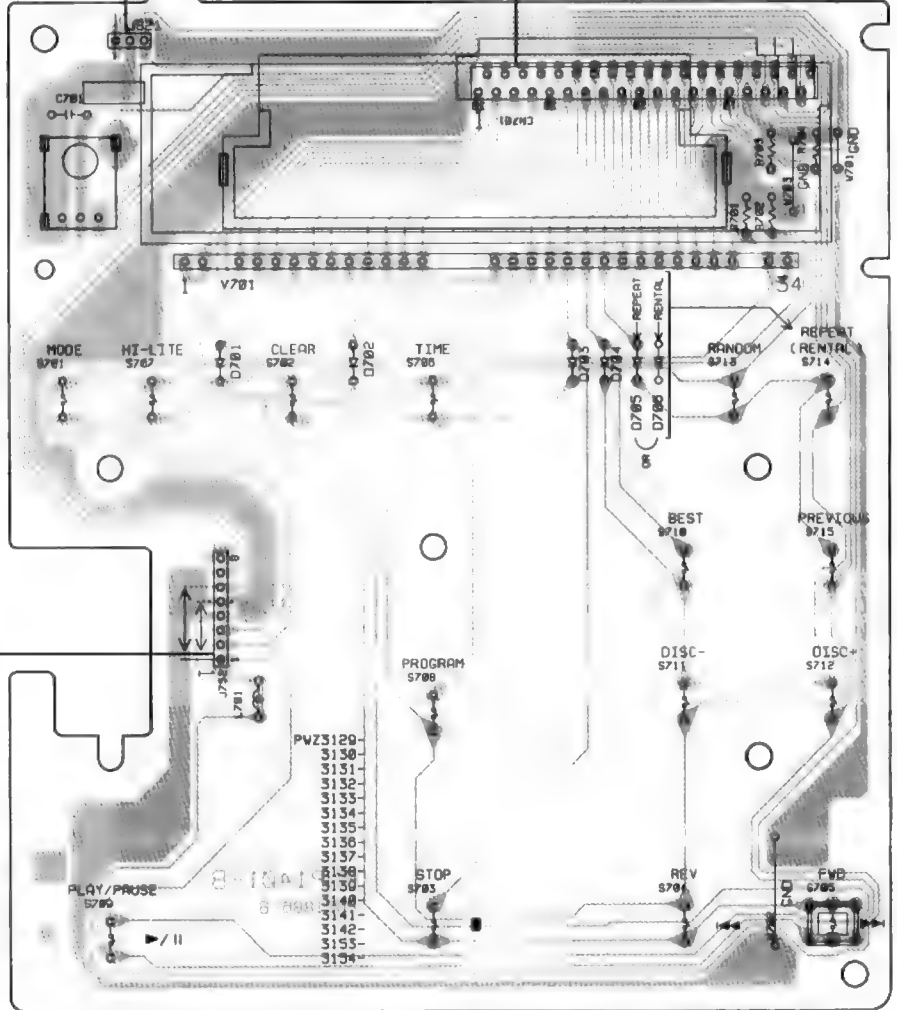
POWER SW PCB ASSY



HOME SW PCB ASSY



FUNCTION PCB ASSY

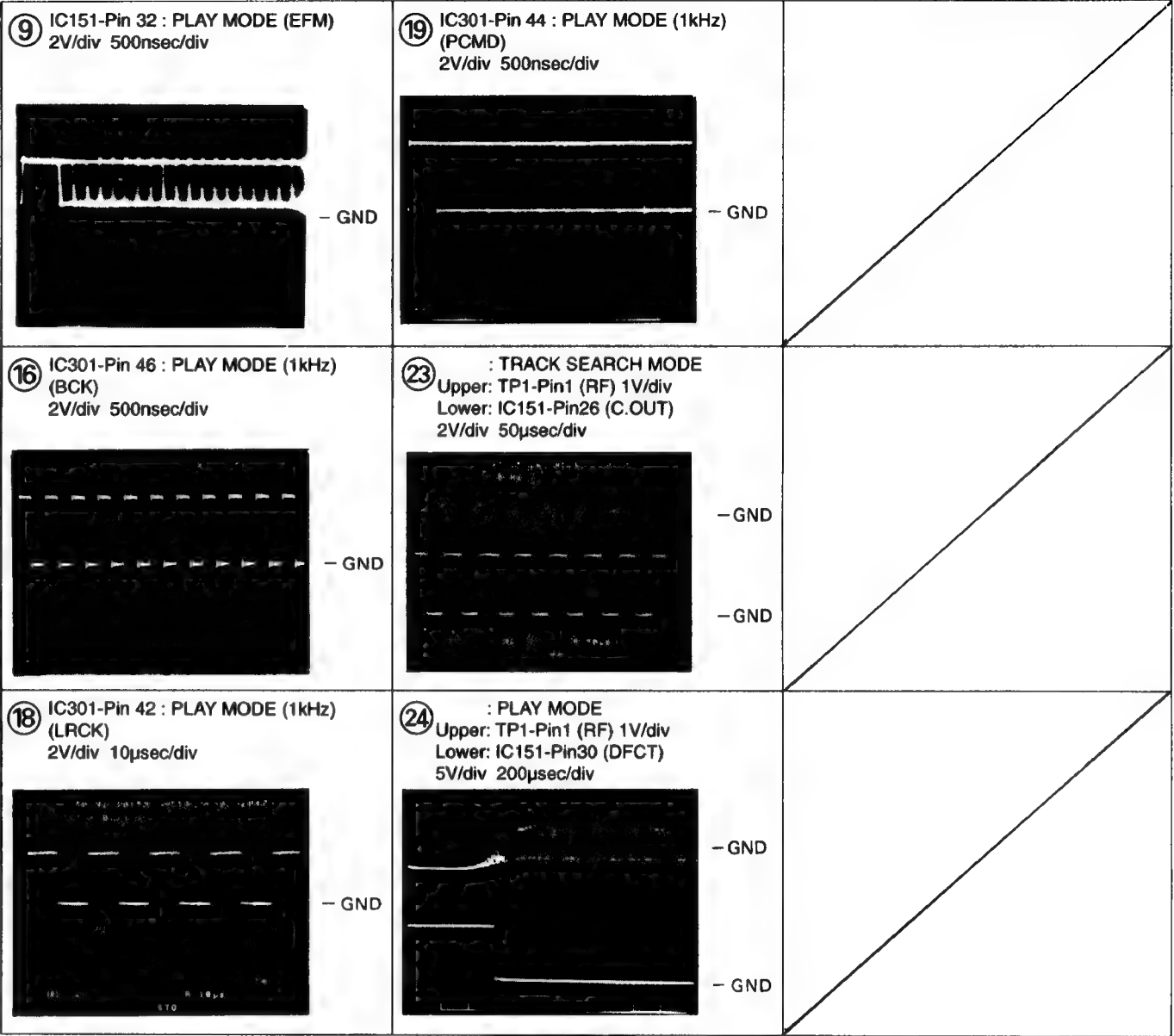
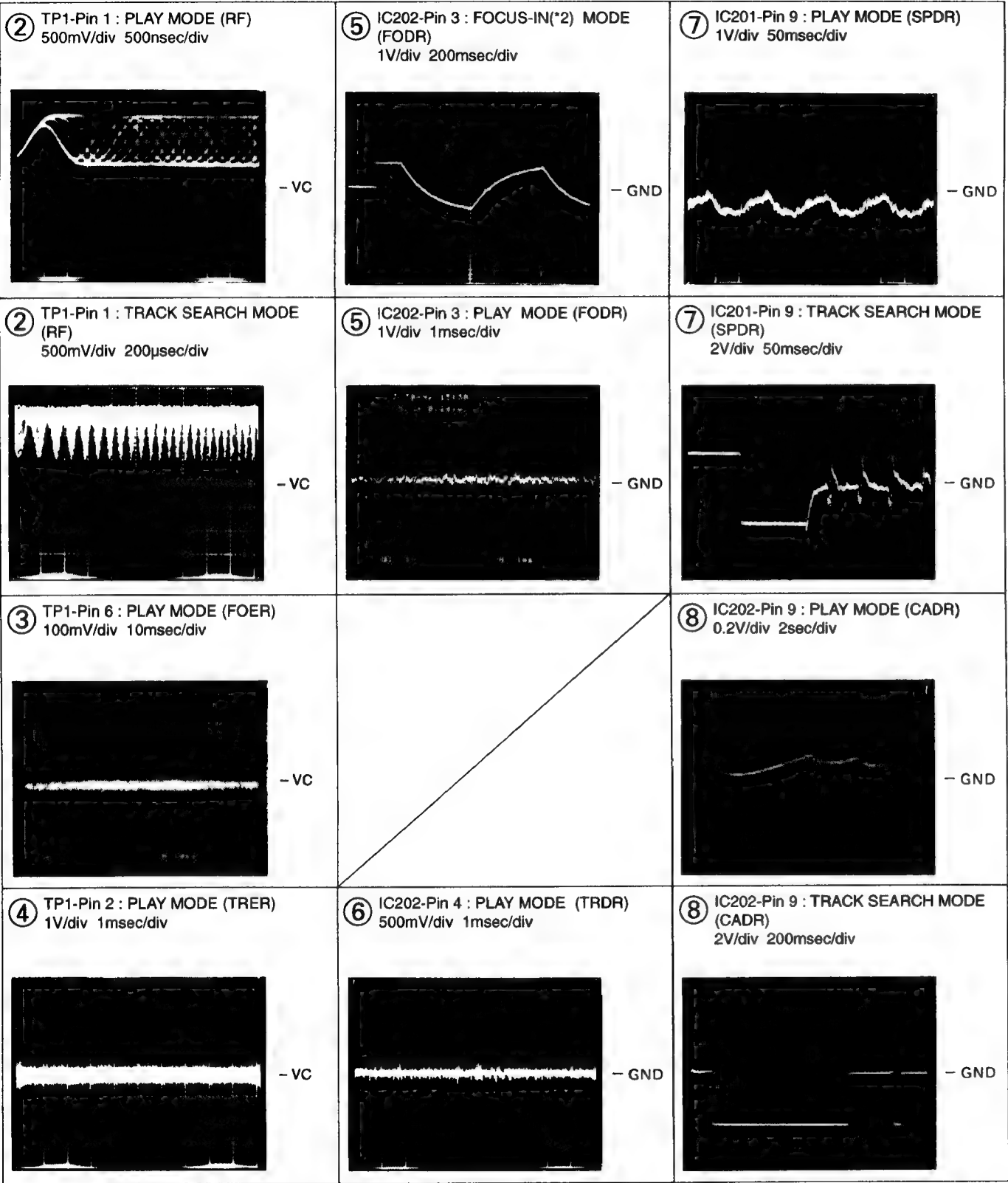


- This diagram is viewed from the mounted parts side.
- The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

Waveforms

Note: The encircled numbers denote measuring point in the schematic diagram.

\*2 FOCUS: Press the key without loading a disc.





## 5. PCB PARTS LIST

### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

|              |               |                             |               |           |             |
|--------------|---------------|-----------------------------|---------------|-----------|-------------|
| 560 $\Omega$ | $\rightarrow$ | 56 $\times$ 10 <sup>1</sup> | $\rightarrow$ | 561 ..... | RD1/4PU561J |
| 47k $\Omega$ | $\rightarrow$ | 47 $\times$ 10 <sup>3</sup> | $\rightarrow$ | 473 ..... | RD1/4PU473J |
| 0.5 $\Omega$ | $\rightarrow$ | 0R5 .....                   |               |           | RN2H0RSK    |
| 1 $\Omega$   | $\rightarrow$ | 1R0 .....                   |               |           | RS1P7R0K    |

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

|                |               |                              |               |            |              |
|----------------|---------------|------------------------------|---------------|------------|--------------|
| 5.62k $\Omega$ | $\rightarrow$ | 562 $\times$ 10 <sup>1</sup> | $\rightarrow$ | 5621 ..... | RN1/4PC5621F |
|----------------|---------------|------------------------------|---------------|------------|--------------|

### ■ LIST OF WHOLE PCB ASSEMBLIES

| Mark     | Symbol & Description      | Part No. |         | Remarks |
|----------|---------------------------|----------|---------|---------|
|          |                           | PD-F605  | PD-F505 |         |
| $\Delta$ | MOTHER PCB ASSY           | PWM1989  | PWM1984 |         |
| NSP      | SUB PCB ASSY              | PWX1434  | PWX1429 |         |
|          | — FUNCTION PCB ASSY       | PWZ3134  | PWZ3129 |         |
| NSP      | — POWER SW PCB ASSY       | PWZ3145  | PWZ3143 |         |
| NSP      | — HOME SW PCB ASSY        | PWZ3149  | PWZ3149 |         |
| NSP      | — HOOD SW PCB ASSY        | PWZ3151  | PWZ3151 |         |
| NSP      | GM MECHANISM              | AXA7026  | AXA7026 |         |
| NSP      | — LO MECHANISM BOARD ASSY | AWX7013  | AWX7013 |         |
| NSP      | — — MECHA PCB ASSY        | AWZ7835  | AWZ7835 |         |
| NSP      | — — SENSOR PCB ASSY       | AWZ7836  | AWZ7836 |         |
| NSP      | — — MOTOR PCB ASSY        | AWZ7837  | AWZ7837 |         |
| NSP      | — — SW PCB ASSY           | AWZ7838  | AWZ7838 |         |
| NSP      | — SERVO MECHANISM ASSY    | AXA7028  | AXA7028 |         |
| NSP      | — — MECHANISM BOARD ASSY  | PWX1192  | PWX1192 |         |

### ■ CONTRAST OF PCB ASSEMBLIES

#### MOTHER PCB ASSY

PWM1984 and PWM1989 have the same construction except for the following:

| Mark | Symbol & Description      | Part No.    |             |
|------|---------------------------|-------------|-------------|
|      |                           | PWM1989     | PWM1984     |
|      | C321                      | CGCYX104K25 | Not used    |
|      | C322                      | CEAS101M6R3 | Not used    |
|      | C325                      | CKCYF103Z50 | Not used    |
|      | CN351                     | HLEM36S – 1 | HLEM32S – 1 |
|      | D321, D391                | ISS254      | Not used    |
|      | JA301 Optical Output Jack | TOTX178     | Not used    |
|      | L321                      | LAU010J     | Not used    |
|      | Q321                      | DTC124ES    | Not used    |
|      | R321                      | RD1/4PU102J | Not used    |

#### FUNCTION PCB ASSY

PWZ3129 and PWZ3134 have the same construction except for the following:

| Mark | Symbol & Description   | Part No.                    |                         |
|------|------------------------|-----------------------------|-------------------------|
|      |                        | PWZ3134                     | PWZ3129                 |
|      | CN701<br>Remote Sensor | HLEM36R – 1<br>SBX1785 – 51 | HLEM32R – 1<br>Not used |

#### POWER SW PCB ASSY

Although PWZ3143 and PWZ3145 are different in part number, they consist of the same components.



# PD-F605, PD-F505

## ■ PCB PARTS LIST FOR PD-F605

| Mark | No. | Description | Parts No. |
|------|-----|-------------|-----------|
|------|-----|-------------|-----------|

### MOTHER PCB ASSY

#### SEMICONDUCTORS

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| △ | IC151        | SERVO IC            | CXA1372Q     |
| △ | IC201, IC202 | POWER OP – AMP IC   | LA6520       |
| △ | IC21         | REGULATOR IC        | PQ05RR12     |
|   | IC301        | EFM DEMODULATION IC | CXD2508AQ    |
|   | IC351        | SYSTEM. CONTROL     | PD4674B      |
|   | IC405        | OP – AMP IC         | NJM4558D – D |
|   | Q321         | TRANSISTOR          | DTC124ES     |
|   | Q341         | N – FET             | 2SK246       |
|   | Q403, Q404   | TRANSISTOR          | 2SD2144S     |
|   | Q405         | TRANSISTOR          | DTC124ES     |
| △ | D11 – D14    | DIODE               | S5688G       |
|   | D218         | DIODE               | 1SS254       |
|   | D321, D341   | DIODE               | 1SS254       |
|   | D391 – D394  | DIODE               | 1SS254       |
| △ | D52          | DIODE               | S5688G       |
|   | D54          | ZENNER DIODE        | MTZJ18B      |

#### COILS AND FILTERS

|            |                |         |
|------------|----------------|---------|
| L302, L303 | AXIAL INDUCTOR | LAU010J |
| L321       | AXIAL INDUCTOR | LAU010J |
| L341       | AXIAL INDUCTOR | LAU1R2J |
| L351       | AXIAL INDUCTOR | LAU100J |
| L391       | AXIAL INDUCTOR | LAU010J |

#### CAPACITORS

|            |                      |             |
|------------|----------------------|-------------|
| C11, C13   | CERAMIC CAPACITOR    | CKCYF103Z50 |
| C15 – C17  | CERAMIC CAPACITOR    | CKCYF103Z50 |
| C25        | ELECT. CAPACITOR     | CEAS332M16  |
| C26        | ELECT. CAPACITOR     | CEAS102M16  |
| C27        | ELECT. CAPACITOR     | CEAS330M16  |
| C52        | ELECT. CAPACITOR     | CEAS101M35  |
| C155       | CERAMIC CAPACITOR    | CKCYB561K50 |
| C156       | CERAMIC CAPACITOR    | CGCYX333K25 |
| C157       | CERAMIC CAPACITOR    | CGCYX103K25 |
| C158, C159 | CERAMIC CAPACITOR    | CGCYX104K25 |
| C160       | ELECT. CAPACITOR     | CEAS4R7M50  |
| C161       | CERAMIC CAPACITOR    | CGCYX104K25 |
| C162       | ELECT. CAPACITOR     | CEAS4R7M50  |
| C163       | CERAMIC CAPACITOR    | CGCYX104K25 |
| C164       | CERAMIC CAPACITOR    | CGCYX103K25 |
| C167       | CERAMIC CAPACITOR    | CKCYF103Z50 |
| C168       | CERAMIC CAPACITOR    | CGCYX333K25 |
| C169       | CERAMIC CAPACITOR    | CGCYX103K25 |
| C170       | CERAMIC CAPACITOR    | CKCYB332K50 |
| C171       | CERAMIC CAPACITOR    | CKCYB102K50 |
| C172       | CERAMIC CAPACITOR    | CKCYB472K50 |
| C205, C210 | CERAMIC CAPACITOR    | CKCYF103Z50 |
| C215       | CERAMIC CAPACITOR    | CKCYF103Z50 |
| C218       | CERAMIC CAPACITOR    | CGCYX103K25 |
| C219       | CERAMIC CAPACITOR    | CKCYF103Z50 |
| C302       | CERAMIC CAPACITOR    | CGCYX473K25 |
| C303       | AUDIO FILM CAPACITOR | CFTYA104J50 |
| C304       | CERAMIC CAPACITOR    | CGCYX473K25 |
| C306       | CERAMIC CAPACITOR    | CKCYB152K50 |
| C307       | CERAMIC CAPACITOR    | CGCYX473K25 |

| Mark | No. | Description | Parts No. |
|------|-----|-------------|-----------|
|------|-----|-------------|-----------|

|             |                   |             |
|-------------|-------------------|-------------|
| C309        | ELECT. CAPACITOR  | CEASR47M50  |
| C310        | CERAMIC CAPACITOR | CKCYF103Z50 |
| C321        | CERAMIC CAPACITOR | CGCYX104K25 |
| C322        | ELECT. CAPACITOR  | CEAS101M6R3 |
| C325        | CERAMIC CAPACITOR | CKCYF103Z50 |
| C341        | CERAMIC CAPACITOR | CCCCH100D50 |
| C342        | CERAMIC CAPACITOR | CKCYB102K50 |
| C343        | CERAMIC CAPACITOR | CCCCH220J50 |
| C351        | ELECT. CAPACITOR  | CEAS471M6R3 |
| C353, C354  | CERAMIC CAPACITOR | CKCYF103Z50 |
| C361        | CERAMIC CAPACITOR | CKCYF103Z50 |
| C393        | CERAMIC CAPACITOR | CCCSL101J50 |
| C421, C422  | CERAMIC CAPACITOR | CKCYB471K50 |
| C423 – C426 | CERAMIC CAPACITOR | CCCSL181J50 |
| C433, C434  | ELECT. CAPACITOR  | CEANP220M10 |
| C435 – C438 | CERAMIC CAPACITOR | CCCSL101J50 |
| C441, C442  | CERAMIC CAPACITOR | CKCYB152K50 |

#### RESISTORS

|              |                 |             |
|--------------|-----------------|-------------|
| VR151, VR152 | VR (22kΩ)       | RCP1046     |
|              | Other Resistors | RD1/4PU□□□□ |

#### OTHERS

|              |                                |             |
|--------------|--------------------------------|-------------|
| CN201        | CONNECTOR 6P                   | RKP – 533   |
| CN202        | CONNECTOR 22P                  | HLEM22S – 1 |
| CN351        | CONNECTOR 36P                  | HLEM36S – 1 |
| JA301        | OPTICAL OUTPUT JACK            | TOTX178     |
| JA391, JA392 | JACK                           | RKN1004     |
| JA401        | JACK                           | PKB1023     |
| X341         | XTAL RES (OSC)<br>(33.8688MHz) | ASS7000     |
| X351         | CERAMIC RESONATOR<br>(4.19MHz) | VSS1014     |



|          |           |
|----------|-----------|
| TERMINAL | RKC – 061 |
|----------|-----------|

### FUNCTION PCB ASSY

#### SEMICONDUCTORS

|             |       |        |
|-------------|-------|--------|
| D701 – D705 | DIODE | 1SS133 |
|-------------|-------|--------|

#### SWITCHES AND RELAYS

|             |        |         |
|-------------|--------|---------|
| S701 – S715 | SWITCH | PSG1006 |
|-------------|--------|---------|

#### CAPACITORS

|      |                   |             |
|------|-------------------|-------------|
| C701 | CERAMIC CAPACITOR | CKCYF103Z50 |
|------|-------------------|-------------|

#### RESISTORS

|             |                 |         |
|-------------|-----------------|---------|
| R701 – R704 | RESISTOR (10kΩ) | ACN7011 |
|-------------|-----------------|---------|

#### OTHERS

|       |                   |              |
|-------|-------------------|--------------|
| CN701 | CONNECTOR         | HLEM36R – 1  |
| V701  | FL INDICATOR TUBE | PEL1089      |
|       | REMOTE SENSOR     | SBX1785 – 51 |

### POWER SW PCB ASSY

#### SWITCHES AND RELAYS






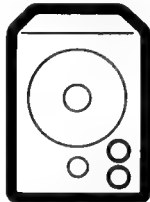
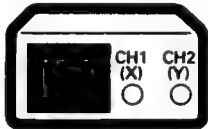
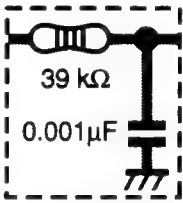
|      |        |         |
|------|--------|---------|
| S752 | SWITCH | PSG1006 |
|------|--------|---------|

| Mark                        | No.        | Description                                   | Parts No.   |
|-----------------------------|------------|---|-------------|
| <b>HOME SW PCB ASSY</b>     |            |   |             |
| <b>SWITCHES AND RELAYS</b>  |            |   |             |
|                             | S811       | PUSH SWITCH                                   | DSG1048     |
| <b>HOOD SW PCB ASSY</b>     |            |   |             |
| <b>SWITCHES AND RELAYS</b>  |            |   |             |
|                             | S821       | PUSH SWITCH                                   | DSG1015     |
| <b>OTHERS</b>               |            |   |             |
|                             | J821       | 3P JUMPER WIRE                                | D20PWW0305E |
| <b>MECHA PCB ASSY</b>       |            |   |             |
| <b>SEMICONDUCTORS</b>       |            |   |             |
|                             | Q651       | TRANSISTOR                                    | DTC124ES    |
|                             | D651       | LED   | VRPG5615S   |
| <b>RESISTORS</b>            |            |   |             |
|                             | R651       | RESISTOR(56k $\Omega$ )                       | ACN7012     |
|                             | R652       | RESISTOR(10k $\Omega$ )                       | ACN7011     |
|                             | R653       | CARBON FILM RESISTOR<br>(220 $\Omega$ , 1/6W) | DCN1062     |
|                             | R654       | RESISTOR(0 $\Omega$ )                         | DCN1065     |
| <b>OTHERS</b>               |            |   |             |
|                             | CN651      | 4P CONNECTOR                                  | 173979 - 4  |
|                             | CN652      | 12P CONNECTOR                                 | 12FMZ - AST |
|                             | CN653      | 22P CONNECTOR                                 | SLEM22R - 2 |
| <b>SENSOR PCB ASSY</b>      |            |   |             |
| <b>SEMICONDUCTORS</b>       |            |   |             |
|                             | D652       | PHOTO INTERRUPTER                             | GP1S24      |
| <b>OTHERS</b>               |            |   |             |
|                             | J652       | 3P JUMPER WIRE                                | D20PWW0315E |
| <b>MOTOR PCB ASSY</b>       |            |   |             |
| <b>OTHERS</b>               |            |   |             |
|                             |            | LOADING MOTOR                                 | VXM1034     |
| <b>SW PCB ASSY</b>          |            |   |             |
| <b>SWITCHES AND RELAYS</b>  |            |   |             |
|                             | S651, S652 | PUSH SWITCH                                   | VSG1006     |
| <b>OTHERS</b>               |            |   |             |
|                             | J656       | 3P JUMPER WIRE                                | D20PWW0315E |
| <b>MECHANISM BOARD ASSY</b> |            |   |             |
| <b>SWITCHES AND RELAYS</b>  |            |   |             |
|                             | S610       | PUSH SWITCH                                   | DSG1016     |
| <b>OTHERS</b>               |            |   |             |
|                             | CN610      |   | 173979 - 4  |


## 6. ADJUSTMENTS (調整方法)

### 6.1 PREPARATIONS (準備)

#### 1.1 Jigs and Measuring Instruments (使用測定器/治工具類)

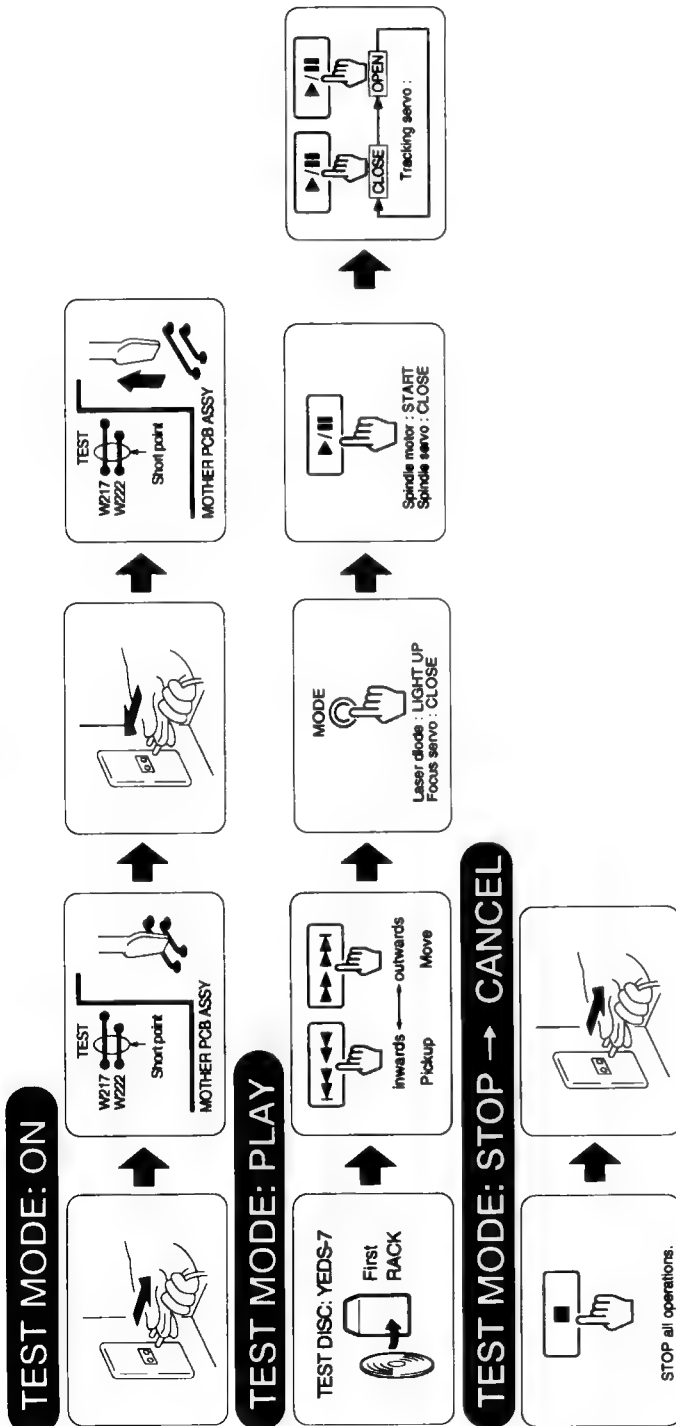
|  |   |  |  |
|--|---|--|--|
|  <p>CD TEST DISC<br/>(YEDS-7)</p> |  <p>⊖ Precise<br/>screwdriver</p>    |  <p>⊖ screwdriver<br/>(small)</p>                       |  <p>⊕ screwdriver<br/>(medium)</p>            |
|  <p>⊕ screwdriver<br/>(large)</p> |  <p>Low-frequency<br/>oscillator</p> |  <p>Dual-trace<br/>oscilloscope<br/>(10 : 1 probe)</p> |  <p>Low pass filter<br/>(39 kΩ + 0.001μF)</p> |

#### 1.2 Necessary Adjustment Points (調整に必要な項目)

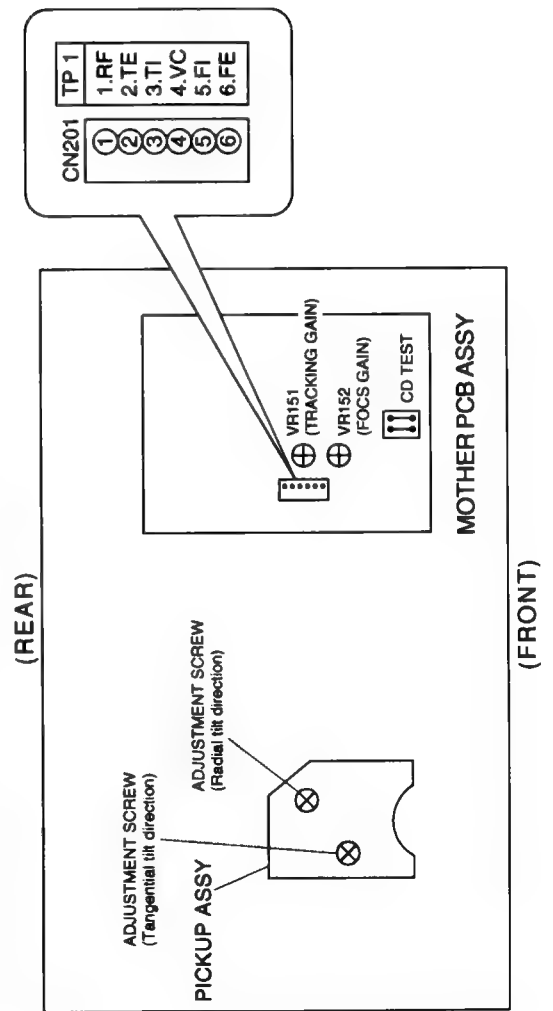
| When (このような時)  | Adjustment points  |
|--|--|
| Exchange<br><b>PICKUP</b><br>(ピックアップを交換した時)              | 1.2.3.4.5.6. → Page 24~26  |
| Exchange<br><b>CD ASSY</b><br>(CD ASSYを交換した時)            | 1.2.3.4.5.6. → Page 24~26  |
| Exchange<br><b>SERVO MECH ASSY</b><br>(サーボメカ ASSYを交換した時) | 1.2.3.4.5.6. → Page 24~26  |
| Exchange<br><b>SPINDLE MOTOR</b><br>(スピンドルモーターを交換した時)    |  ADJ → Page 8 |

## 6.2 ADJUSTMENT (調整)

### 1 How to Start/Cancel Test Mode (テストモードの設定/解除)



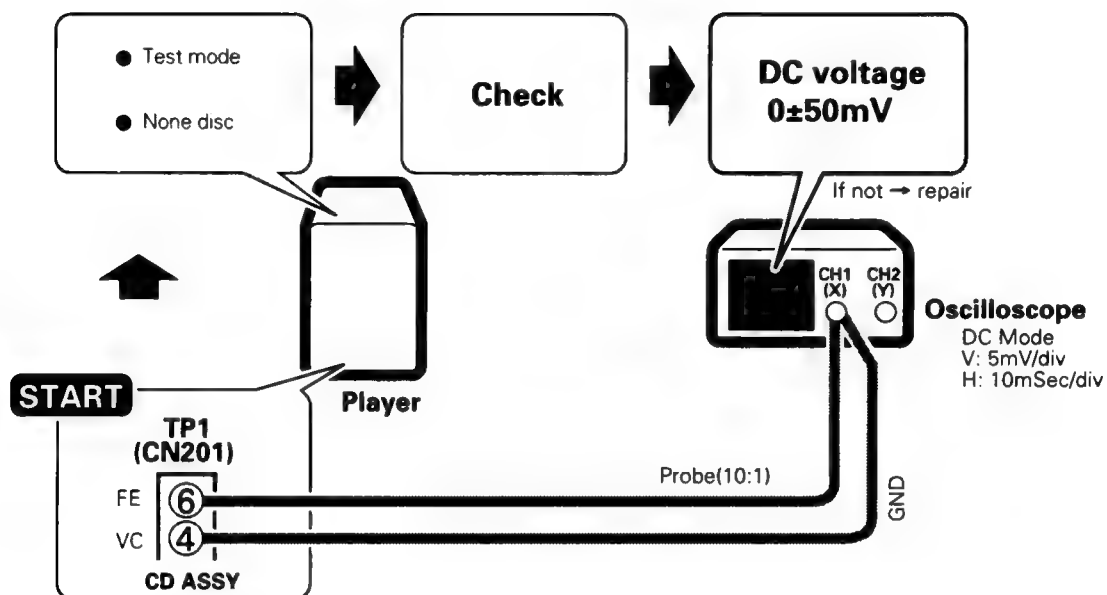
### 2 Adjustment Locations (テストポイントと調整用VRの位置)



## 6.3 Check and Adjustment (確認、調整)

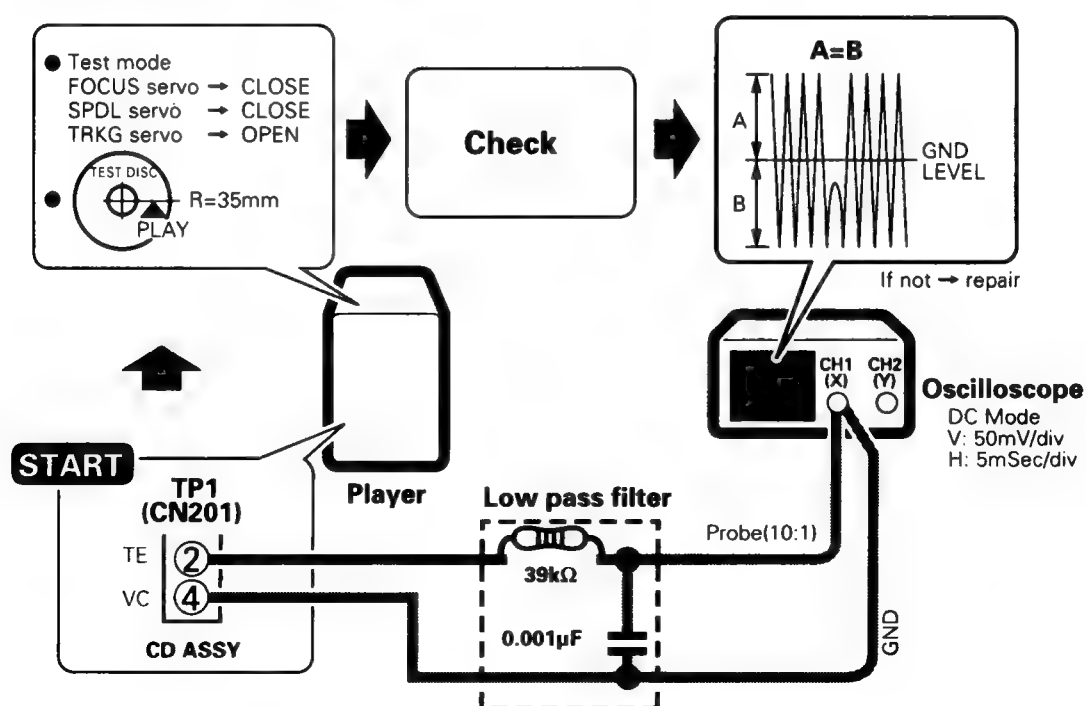
### 1. Focus Offset Check

(フォーカスオフセット確認)



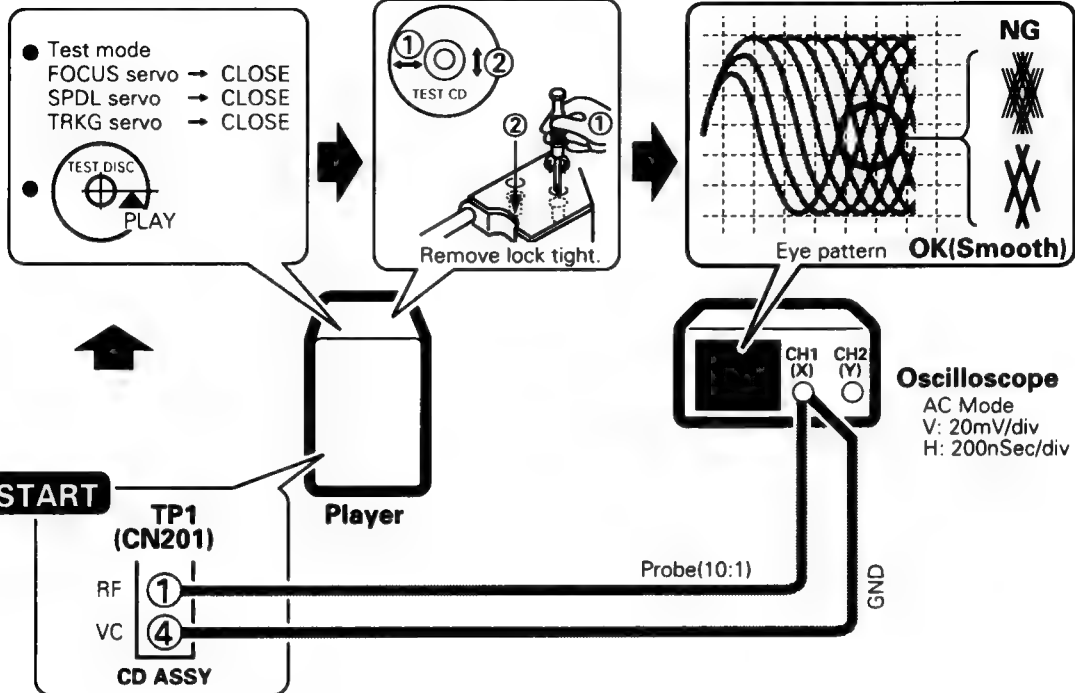
### 2. Tracking Error Balance Check

(トラッキングエラーバランス確認)



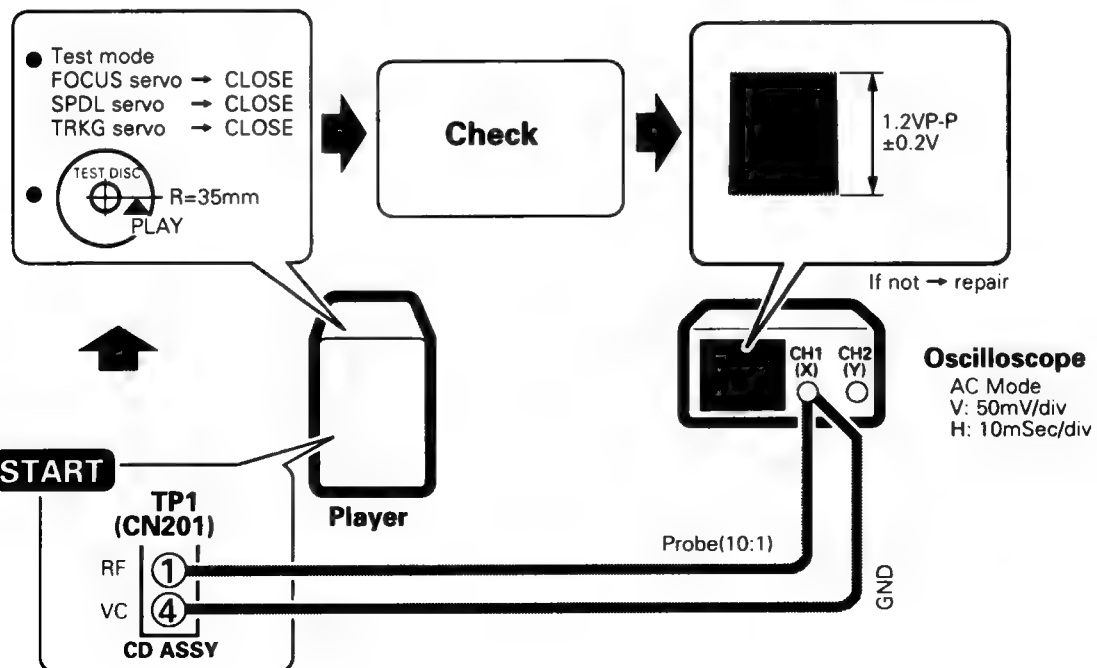
### 3. PICKUP ①RADIAL / ②TANGENTIAL DIRECTION TILT ADJUSTMENT

(ピックアップ①ラジアル方向②タンジェンシャル方向の傾き調整)



### 4. RF LEVEL CHECK

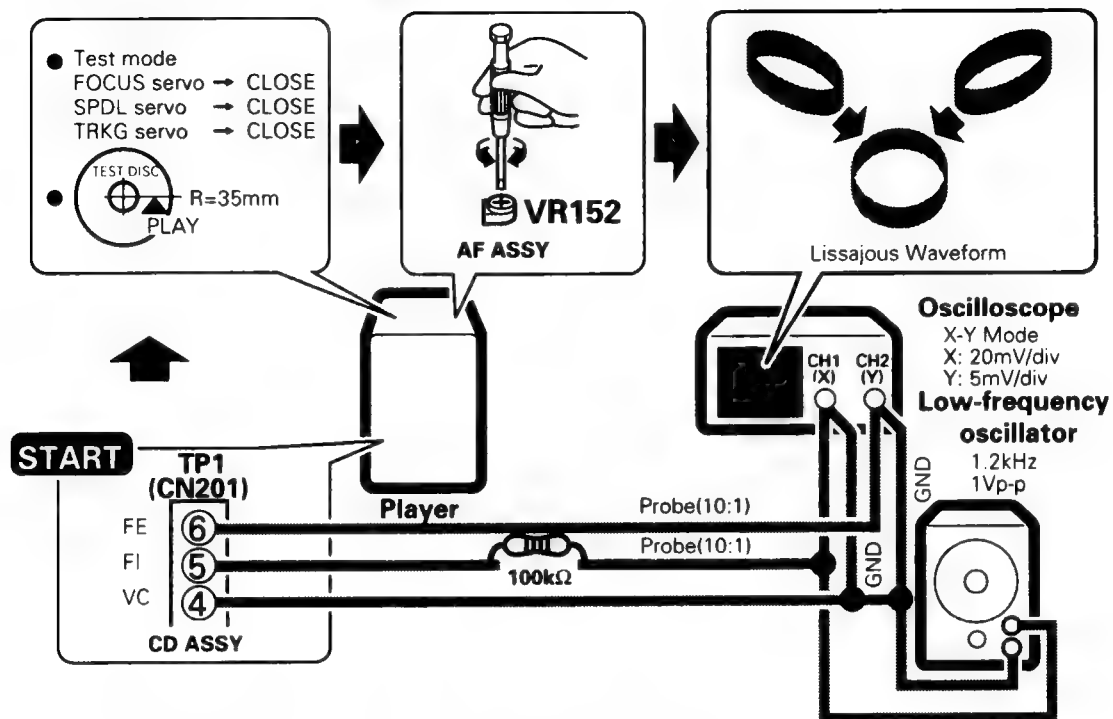
(RFレベル確認)





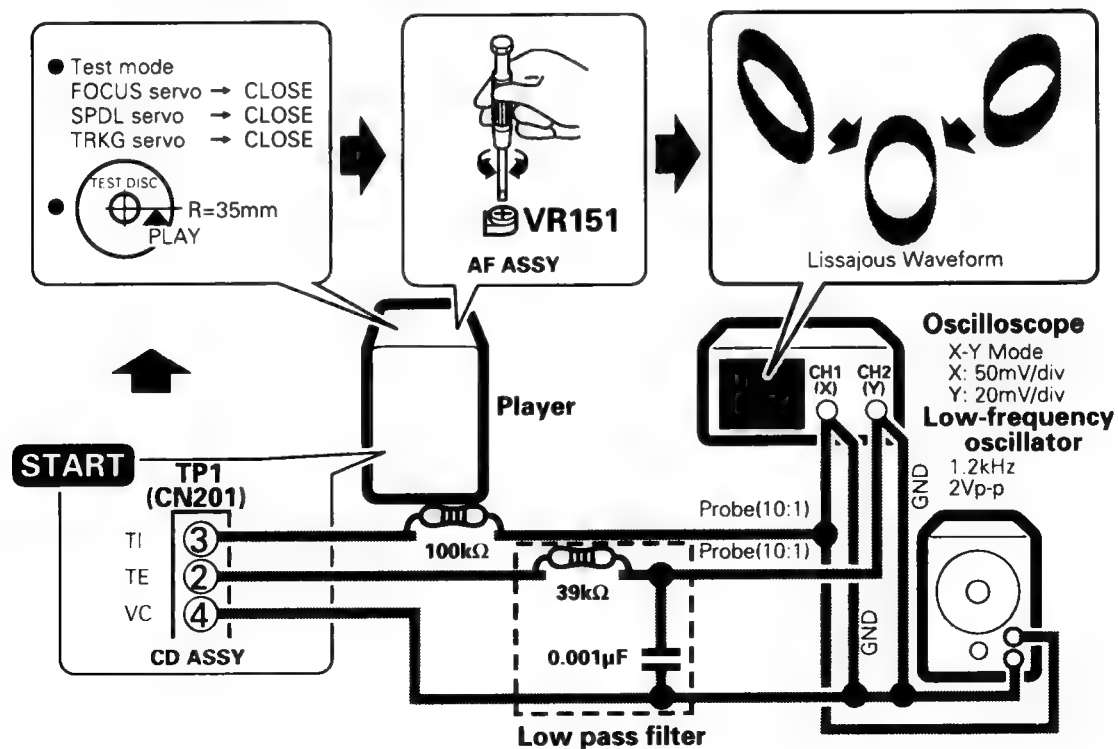
## 5. Focus Servo Loop Gain Adjustment

(フォーカスサーボループゲイン調整)



## 6. Tracking Servo Loop Gain Adjustment

(トラッキングサーボループゲイン調整)

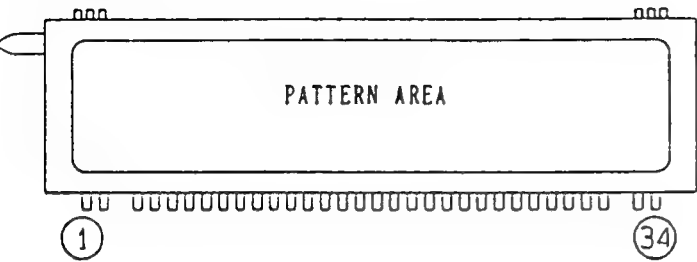


7. FL INFORMATION

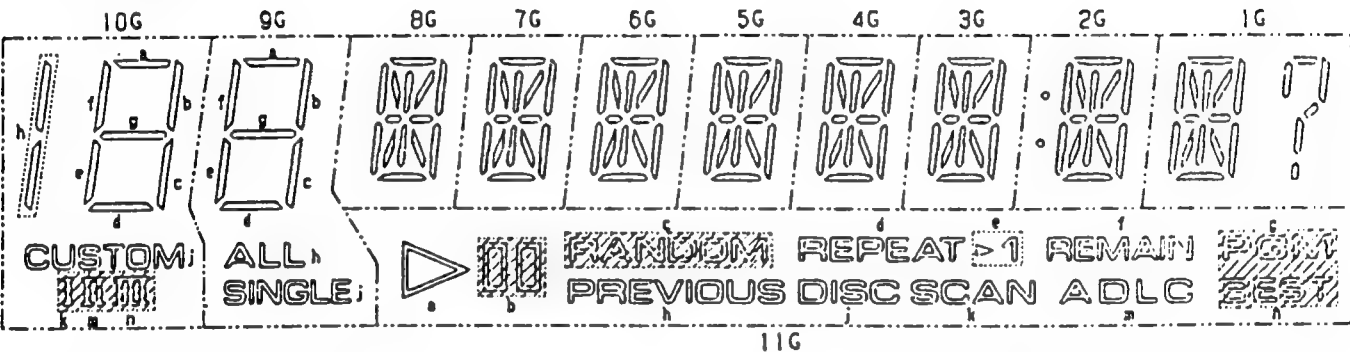
■ PEL1089 (V701 : FUNCTION PCB ASSY)

● FL TUBE

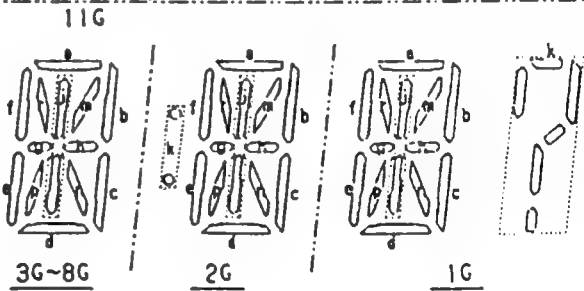
PIN LOCATION



GRID ASSIGNMENT



COLOR OF ILLUMINATION  
Blue-green : Unless specified segment color  
Mandarin :



PIN CONNECTION

|            |   |   |    |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|---|---|----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Pin No.    | 1 | 2 | 3  | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Assignment | F | F | NP | 11G | 10G | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G | NL | NL | NL | p  | r  | a  |

|            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Pin No.    | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| Assignment | b  | c  | d  | e  | f  | g  | h  | j  | k  | m  | n  | NP | F  | F  |

NOTE) F : Filament    1G~11G : Grid    a~h, j, k, m, n, p, r : Anode    NP : No Pin NL : No Lead

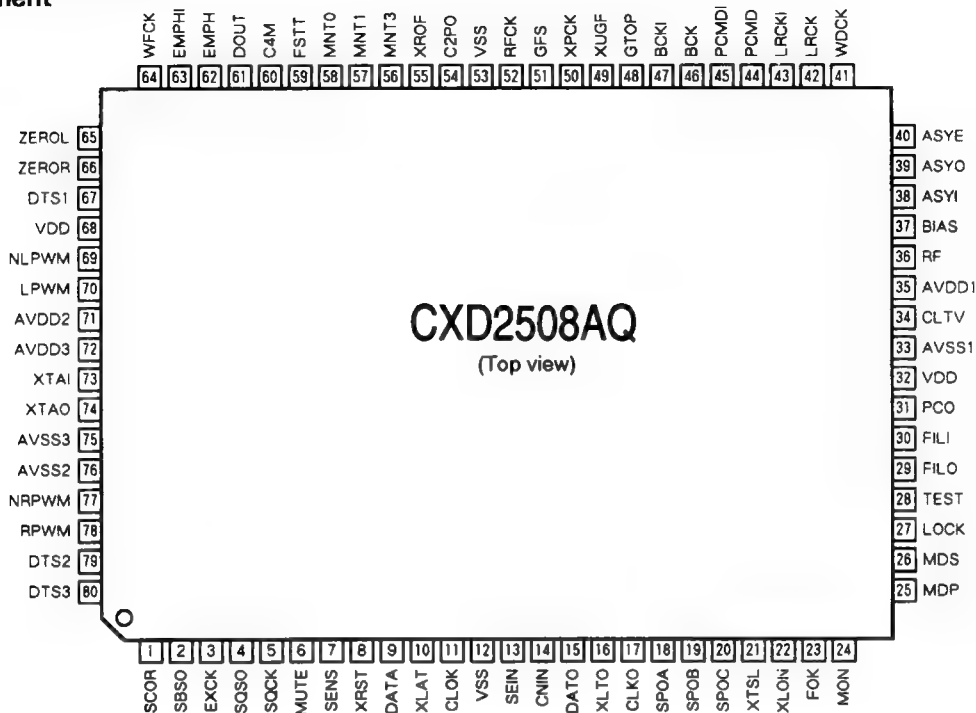
8. IC INFORMATION

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

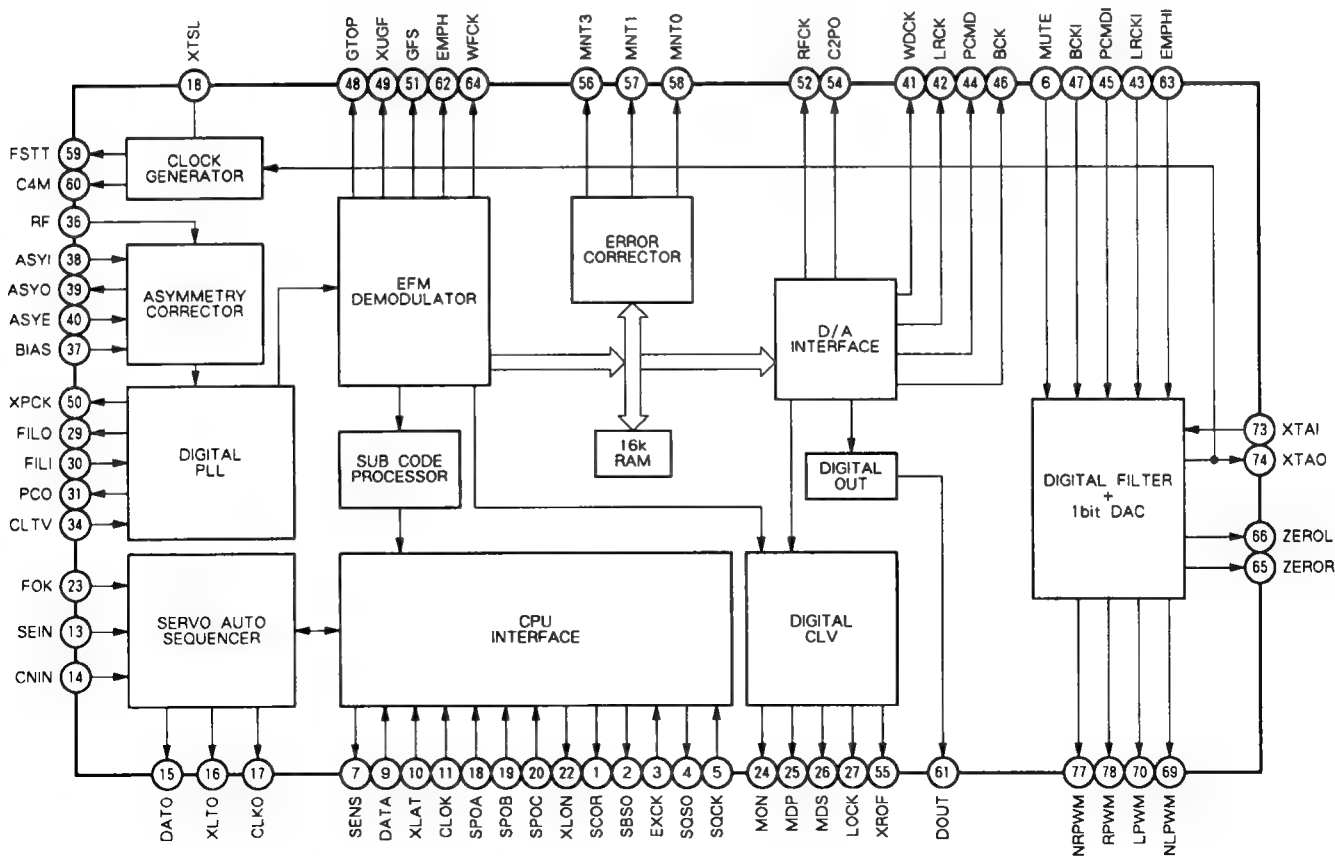
■ CXD2508AQ (IC301 : MOTHER PCB ASSY)

• Digital signal processor for CD

• Pin Arrangement



• Block Diagram



## ● Pin Function

| No. | Pin Name | I/O | Function  |
|-----|----------|-----|---|
| 1   | SCOR     | O   | H when detecting subcode sync. either S0 or S1.   |
| 2   | SBSO     | O   | Serial output of SUBP – W.  |
| 3   | EXCK     | I   | Clock input for SBSO lead out.  |
| 4   | SQSO     | O   | Serial output of SUBQ 80 bit.   |
| 5   | SQCK     | I   | Clock input for SQSO lead out.  |
| 6   | MUTE     | I   | Mute for H and release for L (DAC section).   |
| 7   | SENS     | O   | SENS output to CPU.   |
| 8   | XRST     | I   | System reset. Reset for L.  |
| 9   | DATA     | I   | Serial data input from CPU.   |
| 10  | XLAT     | I   | Latch input from CPU and latch the serial data at falling edge.   |
| 11  | CLOK     | I   | Serial data transferring clock input from CPU.  |
| 12  | VSS      | —   | GND.  |
| 13  | SEIN     | I   | Sens input from SSP.  |
| 14  | CNIN     | I   | Count signal input of track jump.   |
| 15  | DATO     | O   | Serial data output to SSP.  |
| 16  | XLTO     | O   | Serial data latch output to SSP and latch at falling edge.  |
| 17  | CLKO     | O   | Serial data transferring clock output to SSP.   |
| 18  | SPOA     | I   | Microcomputer expansion interface. (Input A)  |
| 19  | SPOB     | I   | Microcomputer expansion interface. (Input B)  |
| 20  | SPOC     | I   | Microcomputer expansion interface. (Input C)  |
| 21  | XTSL     | I   | Xtal selection input pin, L when Xtal is 16.9344MHz and H when Xtal is 33.8688MHz.                      |
| 22  | XLON     | O   | Microcomputer expansion interface. (Output)   |
| 23  | FOK      | I   | Focus OK input pin. Use for SENS output and servo auto sequencer.                                       |
| 24  | MON      | O   | ON/OFF control output of spindle motor.   |
| 25  | MDP      | O   | Servo control of spindle motor.   |
| 26  | MDS      | O   | Servo control of spindle motor.   |
| 27  | LOCK     | O   | Sample the GFS with 460Hz. H output when GFS is H and L output when GFS is L for series of eight times. |
| 28  | TEST     | I   | TEST pin. GND at normal use.  |
| 29  | FILO     | O   | Filter output for master PLL (sleeve=digital PLL).  |
| 30  | FILI     | I   | Filter input for master PLL.  |
| 31  | PCO      | O   | Charge pump output for master PLL.  |
| 32  | VDD      | —   | Digital power supply for DSP.   |
| 33  | AVSS1    | —   | Analog GND for DSP.   |
| 34  | CLTV     | I   | VCO control voltage input for master PLL.   |
| 35  | AVDD1    | —   | Analog power supply for DSP.  |
| 36  | RF       | I   | EFM signal input.   |
| 37  | BIAS     | I   | Constant-current input of the asymmetry correction circuit.   |
| 38  | ASYI     | I   | Comparison voltage input of the asymmetry correction circuit.   |
| 39  | ASYO     | O   | EFM full swing output. (L=VSS, H=VDD).  |
| 40  | ASYE     | I   | L : Asymmetry correction OFF, H : Asymmetry correction ON.  |
| 41  | WDCK     | O   | D/A interface for 48 bit slot and word clock (2FS) .  |
| 42  | LRCK     | O   | D/A interface for 48 bit slot and LR clock (FS).  |
| 43  | LRCKI    | I   | LR clock input to DAC (48 bit slot).  |

## PD-F605, PD-F505

| No. | Pin Name | I/O | Function  |
|-----|----------|-----|---|
| 44  | PCMD     | O   | D/A interface and serial data (2'SCOMP, MSB fast)                             |
| 45  | PCMDI    | I   | Audio data input to DAC (48 bit slot).  |
| 46  | BCK      | O   | D/A interface and bit clock.  |
| 47  | BCKI     | I   | Bit clock input to DAC (48 bit slot).   |
| 48  | GTOP     | O   | GTOP output.  |
| 49  | XUGF     | O   | XUGF output.  |
| 50  | XPCK     | O   | XPLCK output.   |
| 51  | GFS      | O   | GFS output.   |
| 52  | RFCK     | O   | RFCK output.  |
| 53  | VSS      | —   | GND.  |
| 54  | C2PO     | O   | C2PO output.  |
| 55  | XROF     | O   | XROF output.  |
| 56  | MNT3     | O   | MNT3 output.  |
| 57  | MNT1     | O   | MNT1 output.  |
| 58  | MNT0     | O   | MNT0 output.  |
| 59  | FSTT     | O   | 2 divided 3 frequency output of pins 73 and 74.                               |
| 60  | C4M      | O   | 4.2336MHz output.   |
| 61  | DOUT     | O   | Digital Out output pin.   |
| 62  | EMPH     | O   | H when emphasis of playback disc is present and L for absent.                 |
| 63  | EMPHI    | I   | Deemphasis ON/OFF of DAC. (H : ON, L : OFF)                                   |
| 64  | WFCK     | O   | WFCK(WRITE FRAME CLOCK) output.   |
| 65  | ZEROL    | O   | Blank sound data detecting output. "H"(Lch) when detecting blank sound data.  |
| 66  | ZEROR    | O   | Blank sound data detecting output. "H" (Rch) when detecting blank sound data. |
| 67  | DTS1     | I   | Test pin 1 for DAC. Normally L.   |
| 68  | VDD      | —   | Digital power supply for DAC.   |
| 69  | NLPWM    | O   | Lch PWM output. (Negative phase)  |
| 70  | LPWM     | O   | Lch PWM output. (Positive phase)  |
| 71  | AVDD2    | —   | Power supply for Lch PWM driver.  |
| 72  | AVDD3    | —   | Power supply for Xtal.  |
| 73  | XTAI     | I   | Xtal oscillation circuit input of 33.8688MHz                                  |
| 74  | XTAO     | O   | Xtal oscillation circuit output of 33.8688MHz                                 |
| 75  | AVSS3    | —   | GND for Xtal.   |
| 76  | AVSS2    | —   | GND for PWM driver.   |
| 77  | NRPWM    | O   | Rch PWM output. (Negative phase)  |
| 78  | RPWM     | O   | Rch PWM output. (Positive phase)  |
| 79  | DTS2     | I   | Test pin 2 for DAC. Normally L.   |
| 80  | DTS3     | I   | Test pin 3 for DAC. Normally L.   |

### Note:

- PCMD is 2'S complement output of MSB fast.
- GTOP is monitored the protection state of Frame sync. (H : Open the sync. protection window)
- XUGF is frame sync. which is obtained from the EFM signal, is the negative pulse. This signal is former sync. protection.
- XPLCK is made PLL to agree the change point of the clock inversion of EFM PLL, falling edge and EFM signal.
- GFS signal will be H when agreeing with the frame sync. and internal insertion protection timing.
- RFCK is 136  $\mu$  period signal which is obtained by Xtal precision.
- C2PO is the signal which indicating the data error state.
- XRAOF signal is generated when 16K RAM is overed the jitter margin of  $\pm 4F$

## 9. DISASSEMBLY

### ■ REMOVE THE FRONT PANEL

- ① Remove the bonnet.
- ② - ④ Remove the screws and parts.

Note: Remove the screw in step ④ with the hood closed.

- ④ Remove the fixing screw in step ④ from the disc rack, then remove the hook from disc rack boss.

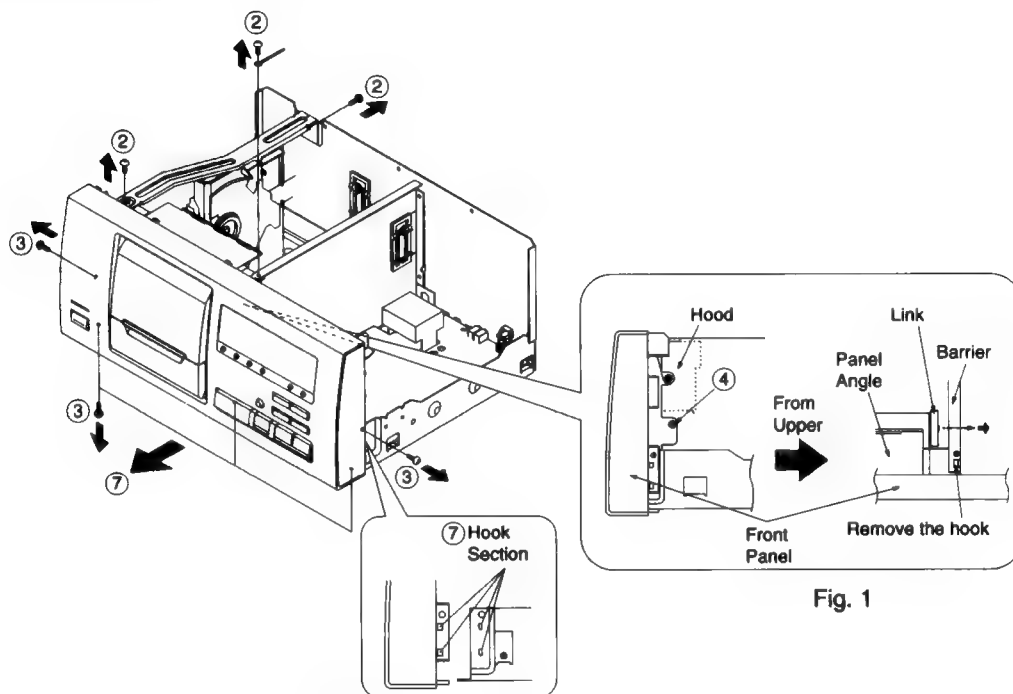


Fig. 2

- ⑤ - ⑥ Remove each part and wire.

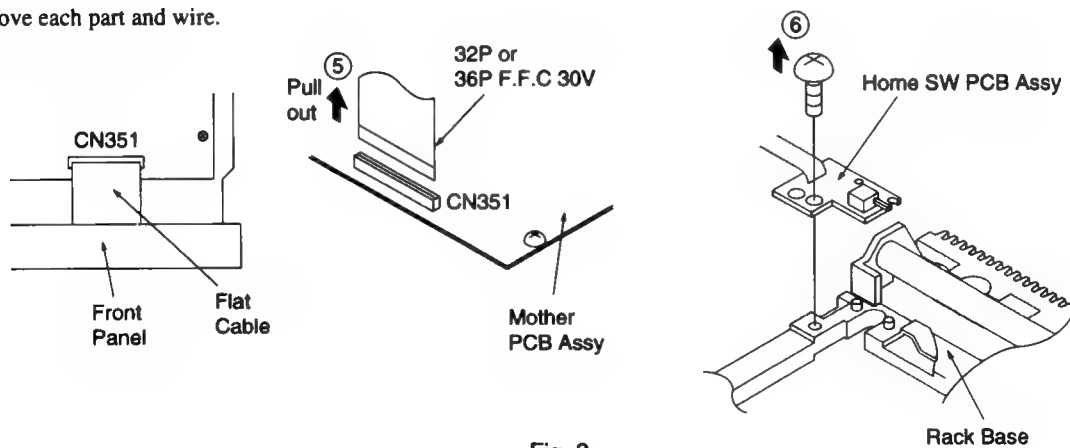


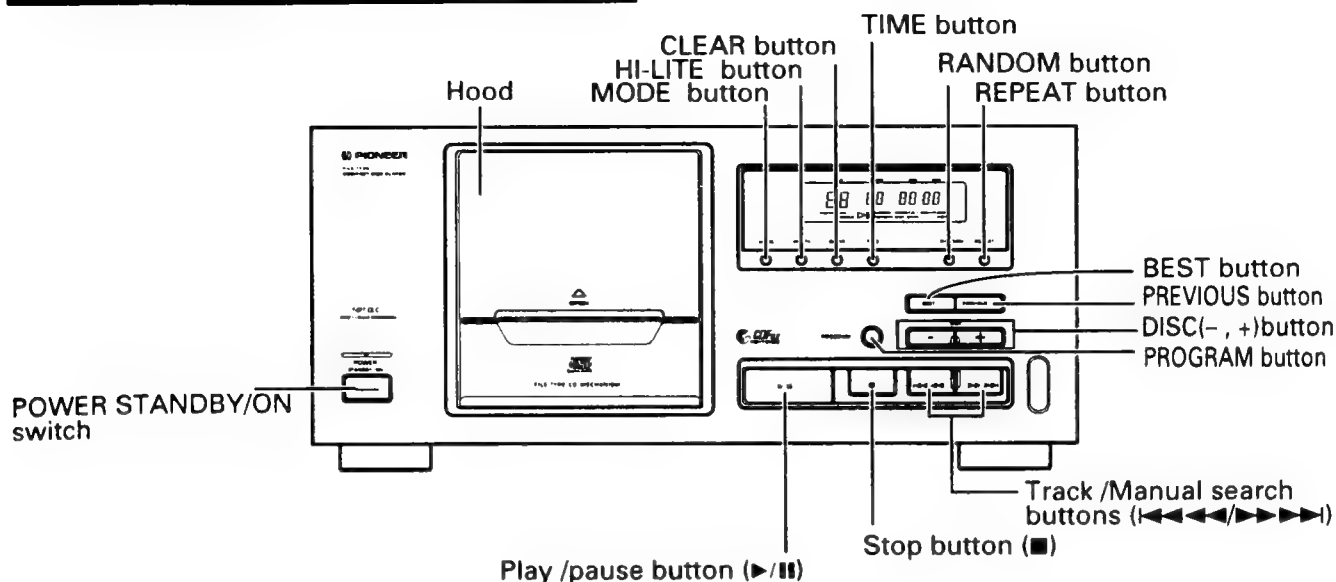
Fig. 3

- ⑦ Remove the front panel.
- ⑦ Shift the front panel slightly toward you while paying attention to the right and left hooks on the chassis. (Fig.2)

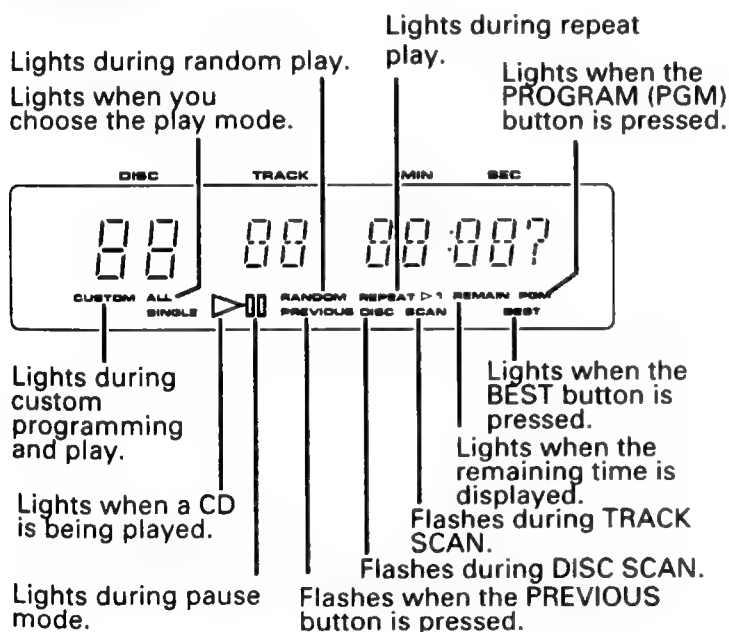


## 10. PANEL FACILITIES

### FRONT PANEL



### DISPLAY



# 11. SPECIFICATIONS

## 1. General

|                                      |   |
|--------------------------------------|---|
| Type .....                           | Compact disc digital audio system                                     |
| Power requirements                   |   |
| U.S. and Canadian models .....       | AC 120V, 60 Hz  |
| U.K., European models .....          | AC 220 - 240V, 50/60 Hz   |
| Australian, New Zealand models ..... | AC 220 -240V, 50/60 Hz  |
| Power consumption                    |   |
| U.S., Canadian models .....          | 11W   |
| U.K., European models .....          | 13W   |
| Australian, New Zealand models ..... | 13W   |
| Operating temperature .....          | +5°C - +35°C<br>(+41°F - +95°F)                                       |
| Weight ( without package ) .....     | 4.8 kg (10 lb 9 oz.)  |
| External dimensions .....            | 420(W) X 316(D) X 190(H) mm<br>16-9/16(W) X 12-7/16(D) X 7-1/2(H) in. |

## 2. Audio section

|   |  |
|---|--|
| Frequency response .....                | 2 Hz - 20 Hz   |
| Level difference between channels ..... | 1.0 dB or less (EIAJ)  |
| Output voltage .....                    | 2 ± 0.3 Vrms (EIAJ)  |
| Wow and flutter .....                   | less than ±0.001 % (V.PEAK)<br>( below measurable level ) (EIAJ) |
| Channels .....                          | 2-channel ( stereo )   |

## 3. Output terminal

Audio line output  
Control input/output jacks(PD-F505 and U.S., Canadian, Australian and New Zealand models of PD-F605 only )  
Optical digital output jack(PD-F605 only)

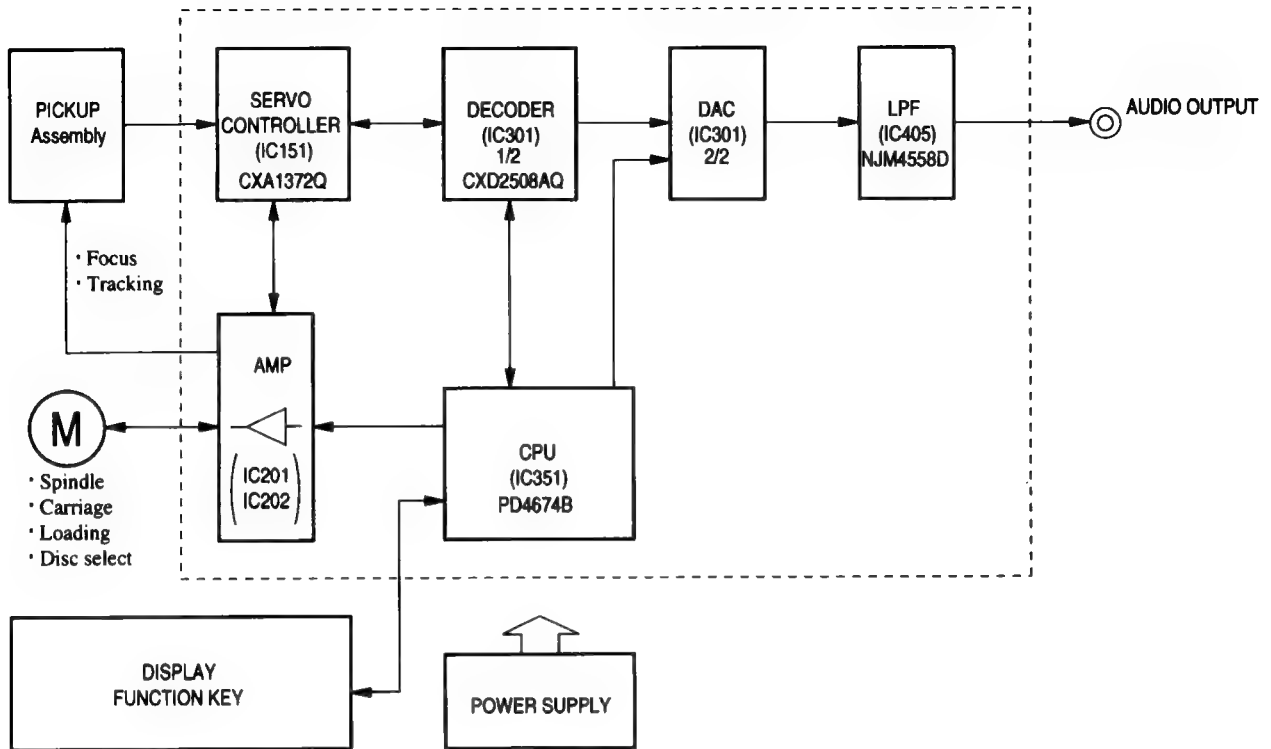
## 4. Accessories

|  |   |
|--|---|
| ● Remote control unit (PD-F605 only) .....   | 1 |
| ● Size AA/R6P dry cell batteries (PD-F605 only) .....  | 2 |
| ● Output cable .....   | 1 |
| ● Control cable (PD-F505 and U.S., Canadian, Australian and New Zealand models of PD-F605 only ) ..... | 1 |
| ● CD liner notes file (Except for U.S. and Canadian models) .....                                      | 1 |
| ● Index label sheet (Except for U.S. and Canadian models) .....  | 1 |
| ● Operating instructions .....   | 1 |

### NOTE:

*Specifications and design subject to possible modification without notice, due to improvements.*

## 12. BLOCK DIAGRAM




# 1. SAFETY INFORMATION

**VARO!**  
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

**ADVERSEL:**  
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

**VARNING!**  
OSYNLIG LASERSTRÅLING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRakta EJ STRÅLEN.




**LASER**  
Kuva 1  
Lasersäteilyn varoitusmerkki

**WARNING!**  
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

**IMPORTANT**  
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1. SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

**LASER DIODE CHARACTERISTICS**  
MAXIMUM OUTPUT POWER: 5 mw  
WAVELENGTH: 780-785 nm

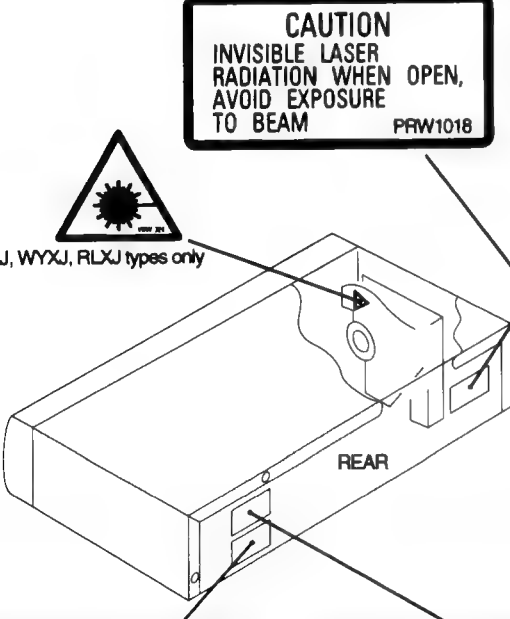


**LASER**  
Picture 1  
Warning sign for laser radiation

## LABEL CHECK (for WPWXJ, WVXJ, WYXJ and RLXJ types)

WPWXJ, WVXJ, RLXJ types only

WPWXJ, WVXJ, WYXJ, RLXJ types only



REAR

**CAUTION**  
INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM  
PRW1018

**CLASS 1 LASER PRODUCT**  
VRW-328

WPWXJ, WVXJ, WYXJ, RLXJ types only

**VARO!**  
Avatessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.  
**VARNING!**  
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Beträkta ej strålen.  
PRW1230

WYXJ type only

WYXJ type only

**ADVARSEL**  
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.  
**VARNING!**  
UNSICHTBARE LASER-STRÅLUNG TRITT AUS, WENN DECKEL (ODER KLAPPE)GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!  
VRW1084

**Additional Laser Caution**

**1. Laser Interlock Mechanism**  
The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on CLMP terminal side (CLMP signal is OFF or high level). Thus, the interlock will no longer function if the switch (S651) is deliberately set to CLMP terminal side. (low level) The interlock also does not function in the test mode \*. Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the Pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

**2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.**

\* : Refer to page 23 on the service manual RRV1457.

## 2. CONTRAST OF MISCELLANEOUS PARTS

### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

|      |   |                      |       |     |       |             |
|------|---|----------------------|-------|-----|-------|-------------|
| 560Ω | → | 56 × 10 <sup>1</sup> | →     | 561 | ..... | RD1/4PU561J |
| 47kΩ | → | 47 × 10 <sup>3</sup> | →     | 473 | ..... | RD1/4PU473J |
| 0.5Ω | → | 0R5                  | ..... |     |       | RN2H0R5K    |
| 1Ω   | → | 1R0                  | ..... |     |       | RS1P1R0K    |

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

|        |   |                       |   |      |       |              |
|--------|---|-----------------------|---|------|-------|--------------|
| 5.62kΩ | → | 562 × 10 <sup>1</sup> | → | 5621 | ..... | RN1/4PC5621F |
|--------|---|-----------------------|---|------|-------|--------------|

### ■ CONTRAST OF PD-F605/WYXJ, WVXJ, WPWXJ, RDXJ AND RLXJ TYPES

PD-F605/WYXJ, WVXJ, WPWXJ, RDXJ, RLXJ and PD-F605/KUXJ have the same construction except for the following:

| Mark     | Symbol & Description   | Part No.         |                  |                  |                   |                  |                  | Remarks   |
|----------|--|------------------|------------------|------------------|-------------------|------------------|------------------|-----------|
|          |  | PD-F605<br>/KUXJ | PD-F605<br>/WYXJ | PD-F605<br>/WVXJ | PD-F605<br>/WPWXJ | PD-F605<br>/RDXJ | PD-F605<br>/RLXJ |           |
| NSP      | Mother PCB Assy  | PWM1989          | PWM1990          | PWM1990          | PWM1996           | PWM1993          | PWM1991          |           |
|          | SUB PCB Assy   | PWX1434          | PWX1435          | PWX1435          | PWX1435           | PWX1435          | PWX1435          |           |
|          | Function PCB Assy  | PWZ3134          | PWZ3135          | PWZ3135          | PWZ3135           | PWZ3135          | PWZ3135          |           |
| NSP      | Power SW PCB Assy  | PWZ3145          | PWZ3146          | PWZ3146          | PWZ3146           | PWZ3146          | PWZ3146          |           |
| $\Delta$ | Power transformer (AC120V)   | PTT1237          | Not used         | Not used         | Not used          | Not used         | Not used         |           |
| $\Delta$ | Power transformer (AC220 – 240V)   | Not used         | PTT1236          | PTT1236          | PTT1236           | Not used         | Not used         |           |
| $\Delta$ | Power transformer<br>(AC110 – 127V/220 – 240V)   | Not used         | Not used         | Not used         | Not used          | PTT1238          | PTT1238          |           |
| $\Delta$ | AC Power Cord  | PDG1015          | PDG1003          | PDG1055          | ADG1123           | PDG1056          | PDG1003          |           |
| $\Delta$ | Fuse (T5A) (For AC power cord)   | Not used         | Not used         | PEK1003          | Not used          | Not used         | Not used         | *1. No.1  |
| $\Delta$ | Strain Relief  | CM – 22C         | CM – 22B         | CM – 22B         | CM – 22B          | CM – 22B         | CM – 22B         |           |
|          | Rear Base  | PNA2258          | PNA2261          | PNA2261          | PNA2287           | PNA2288          | PNA2289          |           |
|          | Foot Assy  | AEC1531          | Not used         | Not used         | Not used          | AEC1531          | Not used         |           |
|          | Insulator  | Not used         | PNW1912          | PNW1912          | PNW1912           | Not used         | PNW1912          | *1. No.2  |
|          | Rubber Sheet   | AEB1111          | Not used         | Not used         | Not used          | AEB1111          | Not used         |           |
|          | Control Panel  | PNW2649          | PNW2653          | PNW2653          | PNW2653           | PNW2654          | PNW2653          |           |
|          | Display Window   | PAM1702          | PAM1714          | PAM1714          | PAM1702           | PAM1702          | PAM1702          |           |
|          | LED Lens   | Not used         | PNW2019          | PNW2019          | PNW2019           | PNW2019          | PNW2019          | *1. No.3  |
|          | Caution Label (HE)   | Not used         | PRW1233          | Not used         | Not used          | Not used         | Not used         | *1. No.4  |
|          | Caution Label (F)  | Not used         | VRW – 328        | VRW – 328        | VRW – 328         | Not used         | VRW – 328        | *1. No.5  |
|          | Caution Label (G)  | Not used         | VRW – 329        | VRW – 329        | VRW – 329         | Not used         | VRW – 329        | *1. No.6  |
|          | Caution Label  | Not used         | Not used         | PRW1018          | PRW1018           | Not used         | PRW1018          | *1. No.7  |
|          | Caution Label  | Not used         | VRW1094          | Not used         | Not used          | Not used         | Not used         | *1. No.8  |
|          | 65 Label   | ORW1069          | Not used         | Not used         | Not used          | Not used         | Not used         |           |
|          | Packing Case   | PHG2162          | PHG2164          | PHG2190          | PHG2205           | PHG2191          | PHG2205          |           |
|          | Index Label  | Not used         | PRW1422          | PRW1422          | PRW1422           | PRW1422          | PRW1422          | *1. No.9  |
|          | Caution 220V Label   | Not used         | Not used         | Not used         | Not used          | ARR1003          | ARR1003          | *1. No.10 |
|          | Liner Note File  | Not used         | PHN1051          | PHN1051          | PHN1051           | PHN1051          | PHN1051          | *1. No.11 |
|          | Rear Spacer  | Not used         | Not used         | PHC1087          | Not used          | Not used         | Not used         | *1. No.12 |
|          | Operating instructions (English)   | PRB1234          | PRB1234          | PRB1234          | PRB1234           | Not used         | Not used         |           |
|          | Operating instructions<br>(English/Spanish/Chinese)                                    | Not used         | Not used         | Not used         | Not used          | PRE1226          | PRE1226          |           |
|          | Operating instructions<br>(French/German/Italian/Dutch<br>/Swedish/Spanish/Portuguese) | Not used         | PRD1006          | Not used         | Not used          | Not used         | Not used         |           |
| NSP      | Cord with Mini Plug  | PDE1247          | Not used         | Not used         | PDE1247           | Not used         | Not used         |           |
|          | Warranty card  | ARY1051          | ARY7009          | ARY7009          | PRY1003           | Not used         | Not used         |           |

Note \*1 : The numbers in the remarks column correspond to the numbers on the exploded views.

# PD-F605, PD-F505

## ■ CONTRAST OF PD-F505/WPWXJ AND RDXJ TYPES

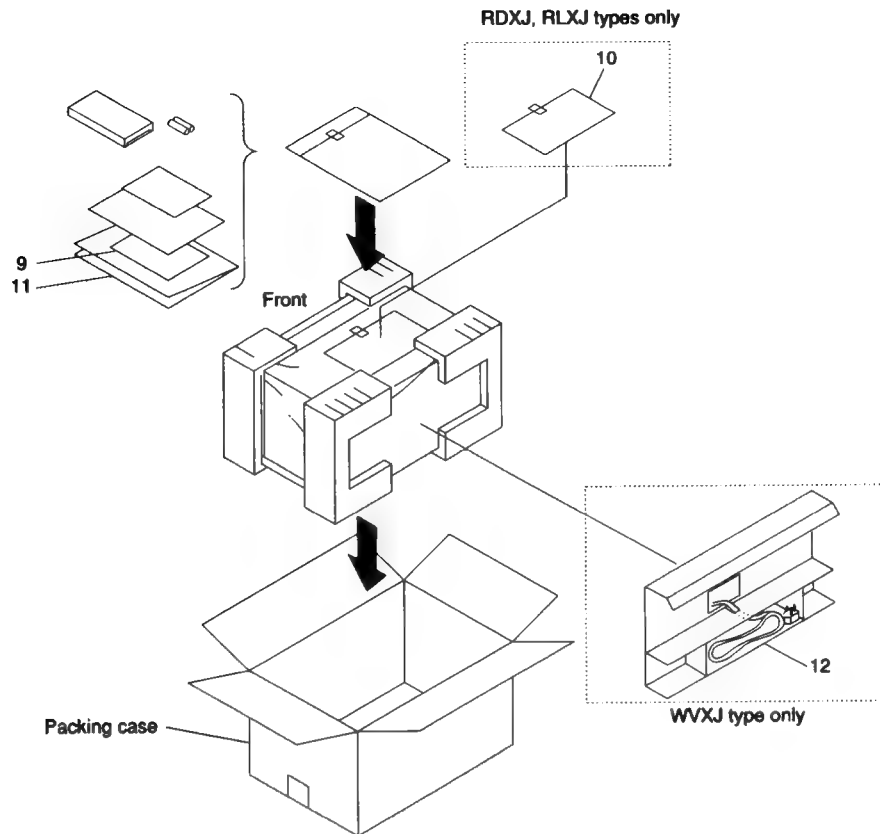
PD-F505/WPWXJ, RDXJ and PD-F505/KUXJ types have the same construction except for the following:

| Mark     | Symbol & Description                                | Part No.     |               |              | Remarks   |
|----------|---|--------------|---------------|--------------|-----------|
|          |   | PD-F505/KUXJ | PD-F505/WPWXJ | PD-F505/RDXJ |           |
| △<br>NSP | Mother PCB Assy                                     | PWM1984      | PWM1985       | PWM1988      |           |
|          | SUB PCB Assy  | PWX1429      | PWX1430       | PWX1430      |           |
|          | └Function PCB Assy                                  | PWZ3129      | PWZ3130       | PWZ3130      |           |
| NSP      | └Power SW PCB Assy                                  | PWZ3143      | PWZ3144       | PWZ3144      |           |
| △        | Power transformer (AC120V)                          | PTT1237      | Not used      | Not use      |           |
| △        | Power transformer (AC220 – 240V)                    | Not used     | PTT1236       | Not used     |           |
| △        | Power transformer<br>(AC110 – 127V/220 – 240V)      | Not used     | Not used      | PTT1238      |           |
| △        | AC Power Cord                                       | PDG1015      | ADG1123       | PDG1056      |           |
| △        | Strain Relief                                       | CM – 22C     | CM – 22B      | CM – 22B     |           |
|          | Rear Base   | PNA2241      | PNA2290       | PNA2291      |           |
|          | Foot Assy   | AEC1531      | Not used      | AEC1531      |           |
|          | Insulator   | Not used     | PNW1912       | Not used     | *1. No.2  |
|          | Rubber Sheet  | AEB1111      | Not used      | AEB1111      |           |
|          | Control Panel                                       | PNW2617      | PNW2651       | PNW2652      |           |
|          | 32P F.F.C/30V                                       | PDD1167      | Not used      | Not used     |           |
|          | 34P F.F.C/30V                                       | Not used     | PDD1168       | PDD1168      | *2        |
|          | LED Lens  | Not used     | PNW2019       | PNW2019      | *1. No.3  |
|          | Caution Label (F)                                   | Not used     | VRW – 328     | Not used     | *1. No.5  |
|          | Caution Label (G)                                   | Not used     | VRW – 329     | Not used     | *1. No.6  |
|          | Caution Label                                       | Not used     | PRW1018       | Not used     | *1. No.7  |
|          | 65 Label  | ORW1069      | Not used      | Not used     |           |
|          | Packing Case  | PHG2156      | PHG2204       | PHG2192      |           |
|          | Index Label   | Not used     | PRW1422       | PRW1422      | *1. No.9  |
|          | Caution 220V Label                                  | Not used     | Not used      | ARR1003      | *1. No.10 |
|          | Liner Note File                                     | Not used     | PHN1051       | PHN1051      | *1. No.11 |
|          | Operating instructions (English)                    | PRB1234      | PRB1234       | Not used     |           |
|          | Operating instructions<br>(English/Spanish/Chinese) | Not used     | Not used      | PRE1226      |           |
| NSP      | Warranty Card                                       | ARY1051      | PRY1003       | Not used     |           |

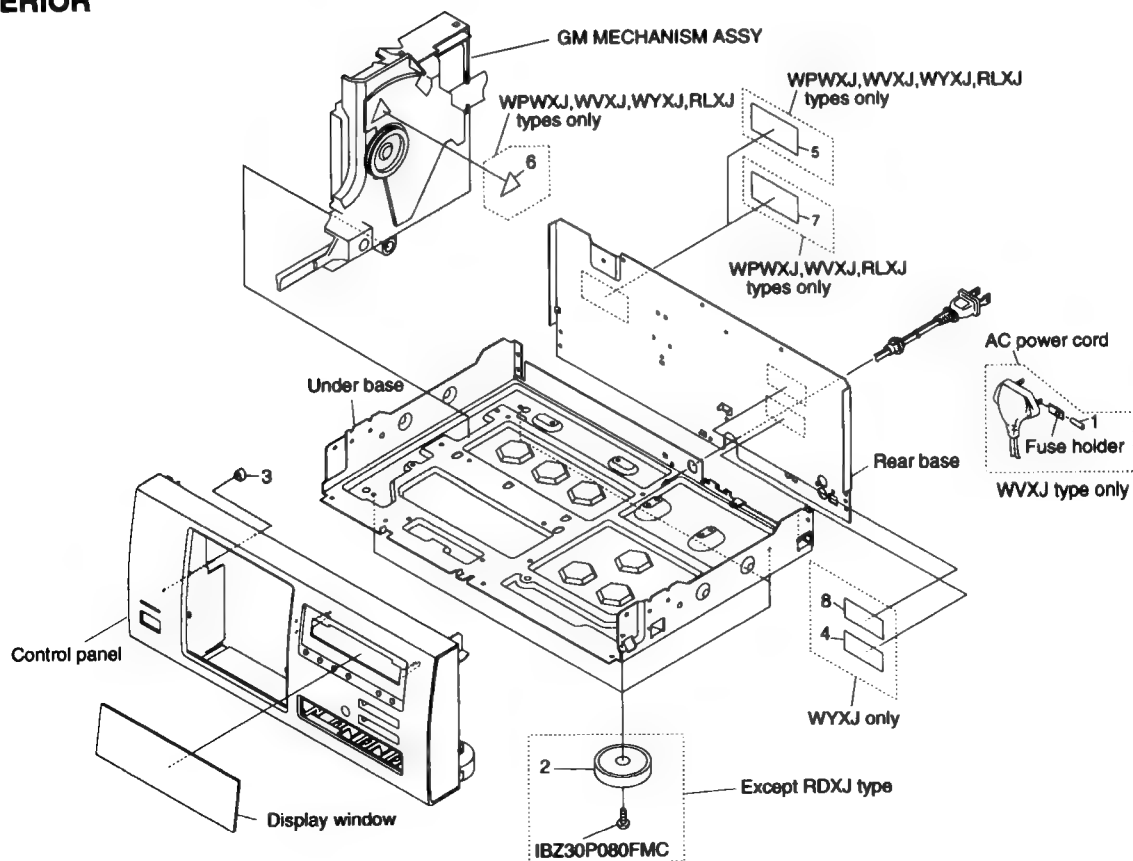
Note \*1 : The numbers in the remarks column correspond to the numbers on the exploded views.

\*2 : Refer to "PCB CONNECTION DIAGRAM"

## ● PACKING



## ● EXTERIOR



# PD-F605, PD-F505

## ■ CONTRAST OF PCB ASSEMBLIES FOR PD-F605

### MOTHER PCB ASSY

PWM1990, PWM1996, PWM1993, PWM1991 and PWM1989 have the same construction except for the following:

| Mark | Symbol & Description     | Part No.    |             |             |             |             | Remarks |
|------|--------------------------|-------------|-------------|-------------|-------------|-------------|---------|
|      |                          | PWM1989     | PWM1990     | PWM1996     | PWM1993     | PWM1991     |         |
| △    | C132                     | Not used    | CEAS100M16  | Not used    | Not used    | Not used    |         |
|      | C302, C304               | CGCYX473K25 | Not used    | Not used    | CGCYX473K25 | Not used    |         |
|      | C303                     | CFTYA104J50 | CEAS471M6R3 | CEAS471M6R3 | CFTYA104J50 | CEAS471M6R3 |         |
|      | C310                     | CKCYF103Z50 | Not used    | Not used    | CKCYF103Z50 | Not used    |         |
|      | C341                     | CCCCH100D50 | Not used    | Not used    | CCCCH100D50 | Not used    |         |
|      | C342                     | CKCYB102K50 | Not used    | Not used    | CKCYB102K50 | Not used    |         |
|      | C343                     | CCCCH220J50 | Not used    | Not used    | CCCCH220J50 | Not used    |         |
|      | C368                     | Not used    | CKCYB102K50 | CKCYB102K50 | Not used    | CKCYB102K50 |         |
|      | C393                     | CCCSL101J50 | Not used    | CCCSL101J50 | Not used    | Not used    |         |
|      | C403                     | Not used    | CCCCH120J50 | CCCCH120J50 | Not used    | CCCCH120J50 |         |
|      | C404                     | Not used    | CCCCH220J50 | CCCCH220J50 | Not used    | CCCCH220J50 |         |
|      | C413 – C416              | Not used    | CFTYA104J50 | CFTYA104J50 | Not used    | CFTYA104J50 |         |
|      | C417                     | Not used    | CGCYX104K25 | CGCYX104K25 | Not used    | CGCYX104K25 |         |
|      | C421, C422               | CKCYB471K50 | Not used    | Not used    | CKCYB471K50 | Not used    |         |
|      | C423 – C426              | CCCSL181J50 | Not used    | Not used    | CCCSL181J50 | Not used    |         |
|      | C429, C430               | Not used    | CCCCH390J50 | CCCCH390J50 | Not used    | CCCCH390J50 |         |
|      | C432                     | Not used    | CEAS470M25  | CEAS470M25  | Not used    | CEAS470M25  |         |
|      | C433, C434               | CEANP220M10 | CEAS220M25  | CEAS220M25  | CEANP220M10 | CEAS220M25  |         |
|      | C435 – C438              | CCCSL101J50 | CCCCH390J50 | CCCCH390J50 | CCCSL101J50 | CCCCH390J50 |         |
|      | C441, C442 (1500pF)      | CKCYB152K50 | PCL1030     | PCL1030     | CKCYB152K50 | PCL1030     |         |
|      | C461                     | Not used    | CKCYF103Z50 | CKCYF103Z50 | Not used    | CKCYF103Z50 |         |
|      | D321, D341               | 1SS254      | Not used    | Not used    | 1SS254      | Not used    |         |
|      | D352                     | Not used    | Not used    | Not used    | 1SS254      | Not used    |         |
|      | D391 – D394              | 1SS254      | Not used    | 1SS254      | Not used    | Not used    |         |
|      | IC31                     | Not used    | ICP – N10   | ICP – N10   | ICP – N10   | ICP – N10   |         |
|      | IC401                    | Not used    | PD2026B(L)  | PD2026B(L)  | Not used    | PD2026B(L)  |         |
|      | JA391, JA392             | RKN1004     | Not used    | RKN1004     | Not used    | Not used    |         |
|      | L302, L303               | LAU010J     | Not used    | Not used    | LAU010J     | Not used    |         |
|      | L341                     | LAU1R2J     | Not used    | Not used    | LAU1R2J     | Not used    |         |
|      | L372                     | Not used    | LAUR47J     | LAUR47J     | Not used    | LAUR47J     |         |
|      | L391                     | LAU010J     | Not used    | LAU010J     | Not used    | Not used    |         |
|      | Q322                     | Not used    | DTC124ES    | DTC124ES    | Not used    | DTC124ES    |         |
|      | Q341                     | 2SK246      | Not used    | Not used    | 2SK246      | Not used    |         |
|      | R310 – R312, R405 – R410 | Not used    | RD1/4PU471J | RD1/4PU471J | Not used    | RD1/4PU471J |         |
|      | R341                     | RD1/4PU511J | Not used    | Not used    | RD1/4PU511J | Not used    |         |
|      | R342, R366               | RD1/4PU105J | Not used    | Not used    | RD1/4PU105J | Not used    |         |
|      | R351                     | Not used    | RD1/4PU221J | RD1/4PU221J | RD1/4PU151J | RD1/4PU221J |         |
|      | R364, R367               | Not used    | RD1/4PU103J | RD1/4PU103J | Not used    | RD1/4PU103J |         |
|      | R365                     | RD1/4PU103J | Not used    | Not used    | RD1/4PU103J | Not used    |         |
|      | R391                     | RD1/4PU244J | Not used    | RD1/4PU244J | Not used    | Not used    |         |
|      | R392                     | RD1/4PU102J | Not used    | RD1/4PU102J | Not used    | Not used    |         |
|      | R401                     | Not used    | RD1/4PU102J | RD1/4PU102J | Not used    | RD1/4PU102J |         |
|      | R419 – R422              | RD1/4PU562J | Not used    | Not used    | RD1/4PU562J | Not used    |         |
|      | R427 – R430              | RD1/4PU153J | RD1/4PU223J | RD1/4PU223J | RD1/4PU153J | RD1/4PU223J |         |
|      | R435 – R438              | RD1/4PU333J | RD1/4PU163J | RD1/4PU163J | RD1/4PU333J | RD1/4PU163J |         |
|      | R439 – R442              | RD1/4PU563J | RD1/4PU433J | RD1/4PU433J | RD1/4PU563J | RD1/4PU433J |         |
|      | S5                       | Not used    | Not used    | Not used    | PSB1006     | PSB1006     |         |
|      | X341 (4.19MHz)           | ASS7000     | Not used    | Not used    | ASS7000     | Not used    |         |
|      | X401 (16.9344MHz)        | Not used    | PSS1008     | PSS1008     | Not used    | PSS1008     |         |



**FUNCTION PCB ASSY**

Although PWZ3134 and PWZ3135 are different in part number, they consist of the same components.

**POWER SW PCB ASSY**

PWZ3146 and PWZ3145 have the same construction except for the following:

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | PWZ3145  | PWZ3146 |         |
|      | D751                 | Not used | PCX1019 |         |

**■ CONTRAST OF PCB ASSEMBLIES FOR PD-F505****MOTHER PCB ASSY**

PWM1985, PWM1988 and PWM1984 have the same construction except for the following:

| Mark | Symbol & Description     | Part No.    |             |             | Remarks |
|------|--------------------------|-------------|-------------|-------------|---------|
|      |                          | PWM1984     | PWM1985     | PWM1988     |         |
| △    | C302, C304               | CGCYX473K25 | Not used    | CGCYX473K25 |         |
|      | C303                     | CFTYA104J50 | CEAS471M6R3 | CFTYA104J50 |         |
|      | C310                     | CKCYF103Z50 | Not used    | CKCYX103Z50 |         |
|      | C341                     | CCCCH100D50 | Not used    | CCCCH100D50 |         |
|      | C342                     | CKCYB102K50 | Not used    | CKCYB102K50 |         |
|      | C343                     | CCCCH220J50 | Not used    | CCCCH220J50 |         |
|      | C368                     | Not used    | CKCYB102K50 | Not used    |         |
|      | C403                     | Not used    | CCCCH120J50 | Not used    |         |
|      | C404                     | Not used    | CCCCH220J50 | Not used    |         |
|      | C413 – C416              | Not used    | CFTYA104J50 | Not used    |         |
|      | C417                     | Not used    | CGCYX104K25 | Not used    |         |
|      | C421, C422               | CKCYB471K50 | Not used    | CKCYB471K50 |         |
|      | C423 – C426              | CCCSL181J50 | Not used    | CCCSL181J50 |         |
|      | C429, C430               | Not used    | CCCCH390J50 | Not used    |         |
|      | C432                     | Not used    | CEAS470M25  | Not used    |         |
|      | C433, C434               | CEANP220M10 | CEAS220M25  | CEANP220M10 |         |
|      | C435 – C438              | CCCSL101J50 | CCCCH390J50 | CCCSL101J50 |         |
|      | C441, C442 (1500pF)      | CKCYB152K50 | PCL1030     | CKCYB152K50 |         |
|      | C461                     | Not used    | CKCYF103Z50 | Not used    |         |
|      | CN351                    | HLEM32S – 1 | HLEM34S – 1 | HLEM34S – 1 |         |
|      | D341                     | ISS254      | Not used    | ISS254      |         |
|      | D352                     | Not used    | Not used    | ISS254      |         |
|      | IC31                     | Not used    | ICP – N10   | ICP – N10   |         |
|      | IC401                    | Not used    | PD2026B(L)  | Not used    |         |
|      | L302, L303               | LAU010J     | Not used    | LAU010J     |         |
|      | L341                     | LAU1R2J     | Not used    | LAU1R2J     |         |
|      | L372                     | Not used    | LAUR47J     | Not used    |         |
|      | Q322                     | Not used    | DTC124ES    | Not used    |         |
|      | Q341                     | 2SK246      | Not used    | 2SK246      |         |
|      | R310 – R312, R405 – R410 | Not used    | RD1/4PU471J | Not used    |         |
|      | R341                     | RD1/4PU511J | Not used    | RD1/4PU511J |         |
|      | R342, R366               | RD1/4PU105J | Not used    | RD1/4PU105J |         |
|      | R351                     | Not used    | RD1/4PU221J | RD1/4PU151J |         |
|      | R364, R367               | Not used    | RD1/4PU103J | Not used    |         |
|      | R365                     | RD1/4PU103J | Not used    | RD1/4PU103J |         |
|      | R401                     | Not used    | RD1/4PU102J | Not used    |         |
|      | R419 – R422              | RD1/4PU562J | Not used    | RD1/4PU562J |         |
|      | R427 – R430              | RD1/4PU153J | RD1/4PU223J | RD1/4PU153J |         |
|      | R435 – R438              | RD1/4PU333J | RD1/4PU163J | RD1/4PU333J |         |
|      | R439 – R442              | RD1/4PU563J | RD1/4PU433J | RD1/4PU563J |         |
|      | S5                       | Not used    | Not used    | PSB1006     |         |
|      | X341 (4.19MHz)           | ASS7000     | Not used    | ASS7000     |         |
|      | X401 (16.9344MHz)        | Not used    | PSS1008     | Not used    |         |

## PD-F605, PD-F505

### FUNCTION PCB ASSY

PWZ3130 and PWZ3129 have the same construction except for the following:

| Mark | Symbol & Description | Part No.    |             | Remarks |
|------|----------------------|-------------|-------------|---------|
|      |                      | PWZ3129     | PWZ3130     |         |
|      | CN701                | HLEM32R - 1 | HLEM34R - 1 |         |

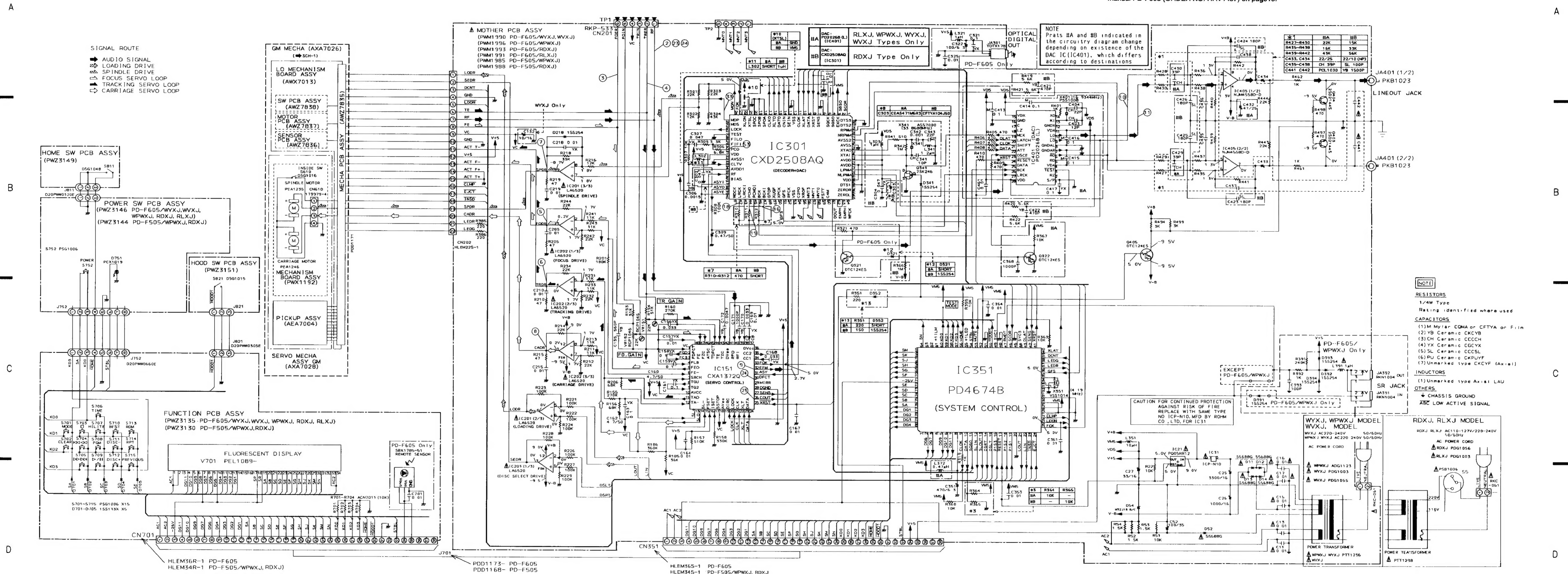
### POWER SW PCB ASSY

PWZ3144 and PWZ3143 have the same construction except for the following:

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | PWZ3143  | PWZ3144 |         |
|      | D751                 | Not used | PCX1019 |         |

SCHEMATIC DIAGRAM

Note:  
The numbers marked with a circle show the number of each measuring point, which correspond to the number in the service manual PD-F605 (ORDER NO. RRV1457) on page13.



# Service Manual

ORDER NO.  
**RRV 1604**

FILE-TYPE CD PLAYER

# PD-F605

## PD-F505

- Refer to the service manual RRV1457 for PD-F605/KUXJ.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

| Type  | Model   |         | Power Requirement       | The voltage can be converted by the following method. |
|-------|---------|---------|-------------------------|---|
|       | PD-F605 | PD-F505 |                         |   |
| WPWXJ | O       | O       | AC220 - 240V            | _____   |
| WYXJ  | O       | X       | AC220 - 240V            | _____   |
| WVXJ  | O       | X       | AC220 - 240V            | _____   |
| RDXJ  | O       | O       | AC110 - 127V/220 - 240V | With the voltage selector                             |
| RLXJ  | O       | X       | AC110 - 120V/220 - 240V | With the voltage selector                             |

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